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CU AMIGA MAGAZINE

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Foundation is a real-time strategy war game which incorporates familiar strategy elements with interesting new concepts. Accomplished strategy game players will enjoy the enhanced control and complex resource management. Beginners will enjoy the accessibility of the gameplay when played in it's basic form and the depth f skill that is attainable with experience.

Forty game missions provided with more mission packs to be released soon, Custom games possible providing infinite landscapes with variable terrains and rules.

- AGA, CyberGraphX and Picasso96 graphics modes are supported.
- Hundreds of speech and sound effects with an option to use AHI.
- The game can use large, wide or small graphics for different screens.
- Uses a database of 10 Million names and 1000 scanned faces.
- Can be installed fully or partially to Hard Drive.
- Fully multitasking and system friendly.
- Amazing original music and custom made CD Audio tracks,
- The game supports many languages with free language packs.
- Free updates to be released regularly to provide advanced features.
- TCP/IP support and optimizations are to be the first updates.





Foundation requires a 2 Meg AGA equipped Amiga (eg. A1200.) The game has been developed for 68030 based Amigas but an A1200 is enough to get the game running. The RTG version will require a CyberGraphX or Picasso96 supported graphics card and at least 8 Megs of fast memory. Four Megs of Video ram is recommended for hires screens. A fast processor is required for running the RTG version.

Extra memory is also helpful as it reduces the amount of disk access during the game. Users with only 2 Mges of memory will find the game will access the disk very frequently. While the game does use it's own cache system it is recommended that you use a dedicated cache program for better support and flexibility not to mention speed.

FOUNDATION £29.99





You are a Bioshifter, the first of it's kind!

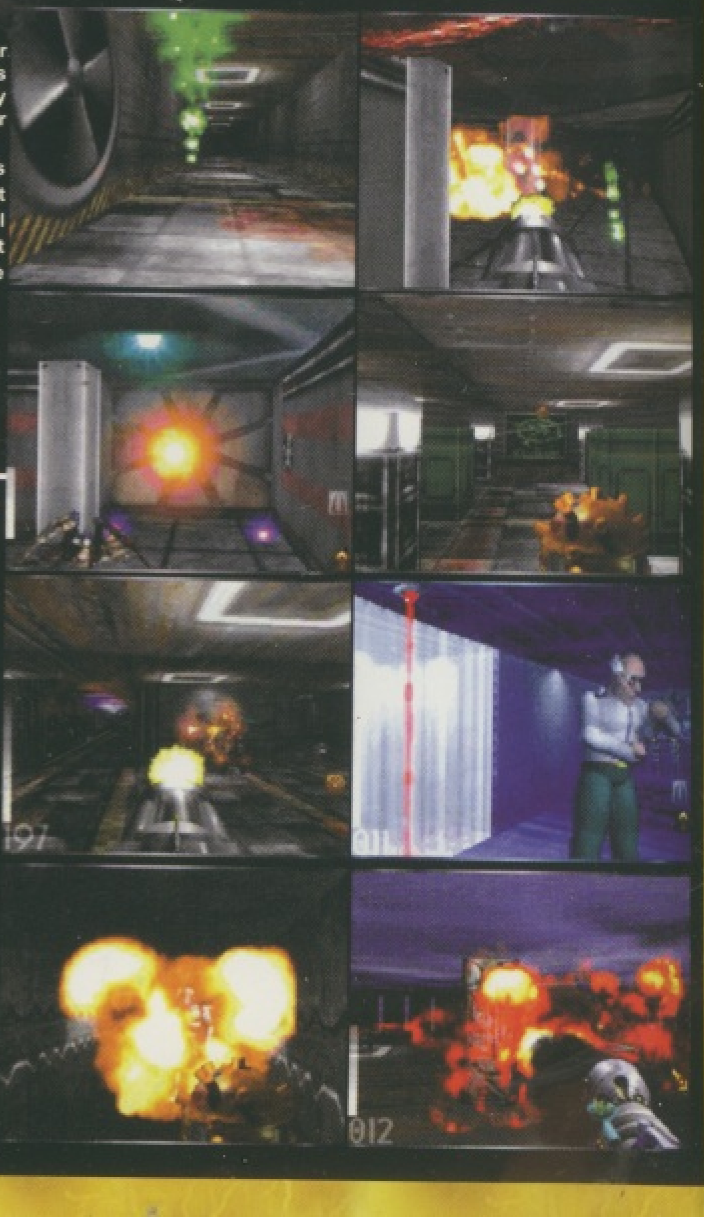
Activated in the Cantex Supply Station your mission is aided by your unique ability to take over the bodies of humans, cyborgs and droids and inherit their skills and weapons. Genetic Species offers furiously invigorating and thrilling 3D action with texture mapping speeds never before seen on any Amiga entertainment title!

With Atmosphere, Gameplay, Addictiveness & Presentation as its highest priorities you will experience the ultimate escapism in a violent and puzzling 3D world, coupled with the most awesome environmental effects and imagery which are all proudly displayed in 256 colours at an incredible (1x1) Pixel Resolution using the most advanced Texture Mapping Engine to date.

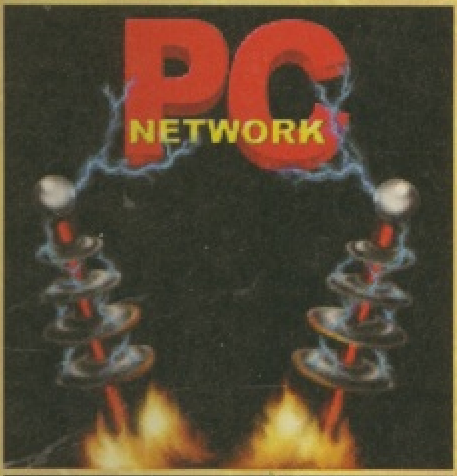
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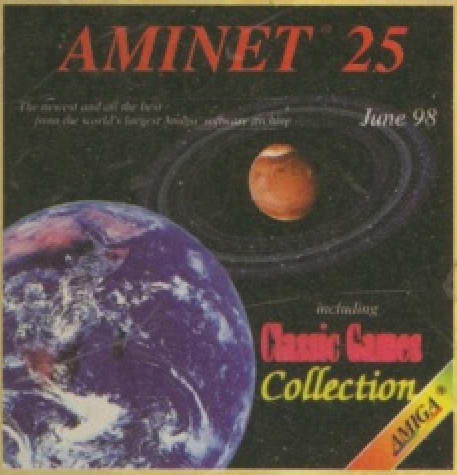






Network PC provides a file system for accessing your PC drives from the Amiga. It will provide any WB program with access to any of your PC drives, including CD, Zip, Jazz, fixed hard drives and also networked drives. The PC acts as slave machine and can therefore not access the Amiga, however an Amiga can read and write to the PC drives. You can not only transfer files between the two machines but also load files directly into you Amiga programs from the PC. The system is WB 2.04+ and Win95 compatible and the PC can perform other tasks simultaneously. Network PC contains all that you need to connect the two machines including full manual, installation disks and CD-ROM of extras and the Amiga Emulator for the PC.

Price - £17.99

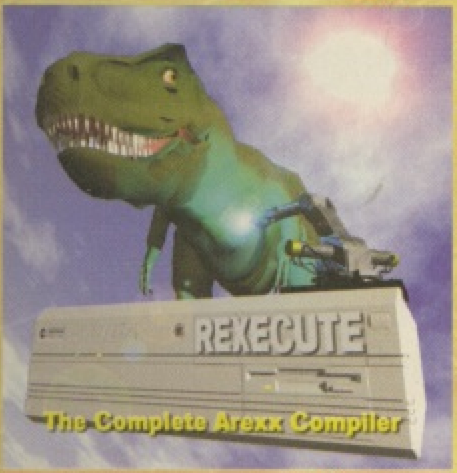


AMINET® Volume 25 offers you everything that was added to the archive since AMINET® Volume 24 was made, plus the Classic Games Collection. AMINET® Volume 25, dated July 1998, consists of approximately 1 gigabyte of software in thousands of archives.

We have Aminet 20 to 25 in stock and Aminet 26 is available in August. The Aminet CD's are the best selling Amiga CD's and are released every 2 months. The Aminet series contains a mirror of the world's largest Amiga Internet archive.

Subscribe to the Aminet Series for only £8.99 per CD and receive your Aminet CD upon release. Subscription is FREE.

Price - £10.99



REXECUTE is a fully featured Arexx compiler for the Amiga. Rexecute is provided on floppy disk and comes with a Hard Drive installer and full documentation on the disk.

With little or no programming experience it is possible to create executables from Arexx scripts and with the on-line help system Rexecute is a very easy program to use.

Included is a tour on the features of Rexecute to get you started quickly.

Requires Workbench 2.04 or above, a hard disk, at least 2Mb of Ram.

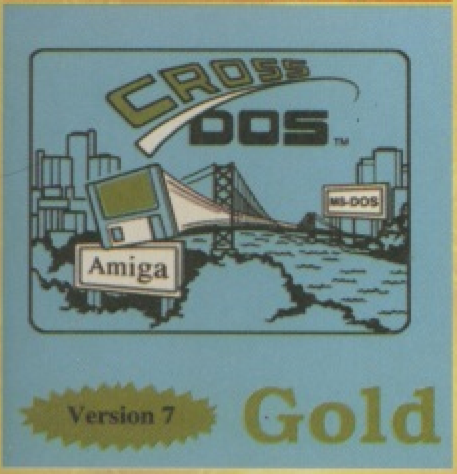
Price - £19.99



Amiga Forever 2.0 allows users to share data between Amiga and other systems, and to use their existing Amiga software and data on non-Amiga hardware. Additionally, software, tutorial and reference files are included. Amiga Forever includes hundreds of pages of documentation in HTML and AmigaGuide formats, with thousands of useful links and cross references.

· Amiga Explorer 2.0 networking software, which allows you to connect an Amiga to one or more PCs, and access Amiga files.
· UAE Amiga emulator for Windows and DOS, and Fellow for DOS. All emulation support files (Amiga ROM and OS, Cloanto Amiga software, Picasso 96 drivers, etc.) can easily be used by other implementations (Linux, Be, Next, etc.) of these emulators, as well as by future new versions.
· Cloanto Personal Paint 7.1 (paint, animation and image processing software), DirDiff 5.1 (file synchronisation and replication software) and AmiToRTF 4.2 (to convert texts from Amiga to Windows formats), usable on a "real" Amiga.

Price - £39.99

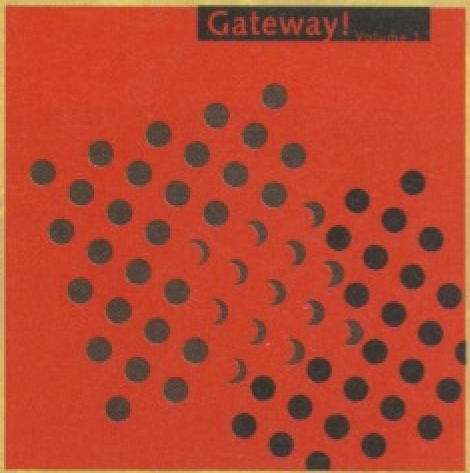


Cross Dos 7 allows users to read and write PC and Atari ST formatted floppy and hard disks directrly from the Amiga. CrossDos integrates into the Amiga Operating system, allowing access from virtually any Amiga application.

Features include:
- Read & Write to PC Floppies & Hard Disks.
- Windows 95/98 Long Filename support.
- Supports removeable drives such as Zip.
- Disk changes are sensed automatically.
- MS-DOS hard disk configuration software.
- Utilities to partition, format, copy PC Disks

Requires Workbench 2.04 or above.

Price - £39.99



Gateway! Volume 3 is a double CD-ROM and with the release of NetBSD versio 1.3.2, a milestone in the widened space of UNIX-alike operating systems has been set.
Gateway! Volume 3 offers NetBSD 1.3.2 in full featured release versions with installation files for all 16 supported platforms: Amiga, Atari, Archimedes, HP300, i386, Mac (68k), Motorola, VME (68k), DEC 5000, Sparc, Sun 3 (68k) & VAX. Including X Window, all sources in compressed form, binary distributions for m68k and i386 for many tools, editors, libraries, TeX, & games. Additionally Xfree86 is supplied for i386.
You can boot from the CD-ROM without hassle on the Amiga, i386 & Sparc - no complex installation, all menu driven. This CD is directed at the UNIX-Meister.

Price - £9.99



AMINET® SET 6 offers you everything that was added to the archive since AMINET® SET 5 was made, plus full versions of Wordworth 5 SE, TurboCalc 3.5, PPaint 6.4 & Wildfire 3.38.

AMINET® SET 6, dated March 1998, consists of approximately 4 gigabytes of software in 7.500 archives. Since the release of Aminet 23 more than 440 MB of new software have appeared.

All Six Aminet Box Sets in stock.

Aminet Box Set 1, 2 & 3 £15.99 each
Aminet Box Set 4, 5 & 6 £27.99 each

Aminet Set 6 Price - £27.99



SCALA MM 400 is the well known software to generate perfect presentations or multimedia applications. At it's simplest it is a fantastic video titling package and at it's best it is a superb multimedia authoring package. Scala MM 400 provides a huge array of video fonts, textures, fades and wipes for high quality video work. This CD edition also contains extra materials on top of the original fonts, backgrounds and buttons provided with Scala MM 400.

The CD contains full documentation on Scala and an interactive presentation, instantly demonstrating the powerful features of Scala MM 400.
Upgrade from Scala MM300 for only £49.99

Price - £69.99



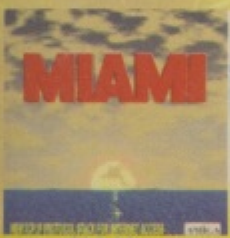
AMI-FILE SAFE comes of age with the release of Professional File System 2 (PFS2). PFS 2 is an Amiga replacement file system for hard drive users which provides superior performance with up to 500% improvements over the standard Fast File System. Disks are always valid with no more 'validating disk!'. PFS 2 provides unparalleled reliability and concurrent access without performance loss. PFS 2 comes on CD and improvements over Ami-FileSafe include........
· 68000, 68020, 68040 and 68060 versions.
· improved testing procedures, more reliable.
· fully Ami-FileSafe compatible plus disk repair.
· early problem detection mechanism. This detects problems with your disk before it is too late, ensuring optimal protection of your data.

Price - £29.99



Siamese 2.1 is based on the full 2.5 Siamese RTG pack but without the TCP/IP Ethernet capabilities and uses a normal null modem cable (not supplied) for connection between the Amiga and PC.
Provided is support for all serial speeds available to both PC and the Amiga. Supports third party high speed serial cards. Remote control the Amiga from the PC. Most RTG friendly Amiga screens will appear in a Window on Win95/NT4. Single keyboard and mouse control for both the Amiga and PC. PC drives are accessible from a standard AGA Amiga, with up to 13k per second. Supports SCSI networking to speed up file transfer (1Mb / sec) with suitable controllers on the Amiga and Amiga. Works with Network PC and Amiga Forever packages.

Price - £29.99



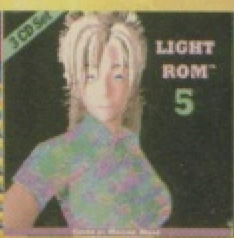
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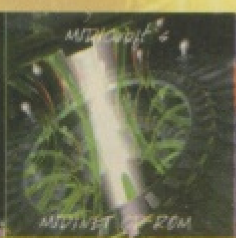
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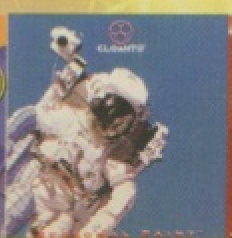
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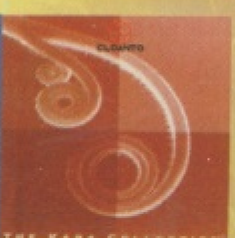
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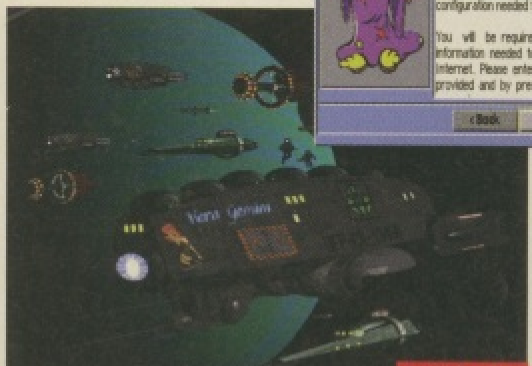


Make the most of this month's CU Amiga as it's the last you'll ever see. Sadly the magazine has been forced to close. See the news pages for the full story. Even so, this hasn't stopped us banging out one last top notch issue for you. In fact we've tried harder than ever before to make sure this is an issue to remember. It's been great fun for us all over the years, and a great privilege for me personally to occupy this position. Many thanks for reading. Enjoy this one and I'll see you again soon.

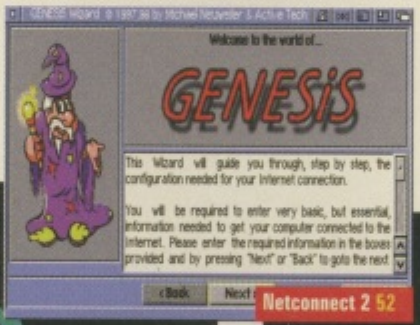
Tony Horgan, Editor

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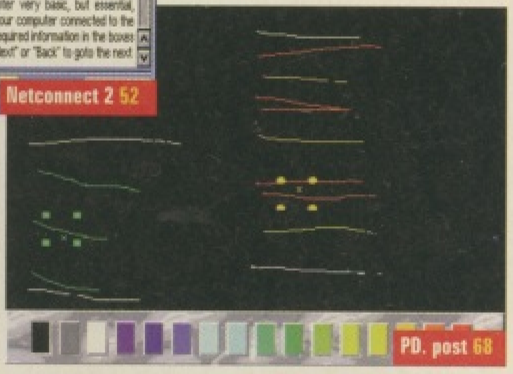
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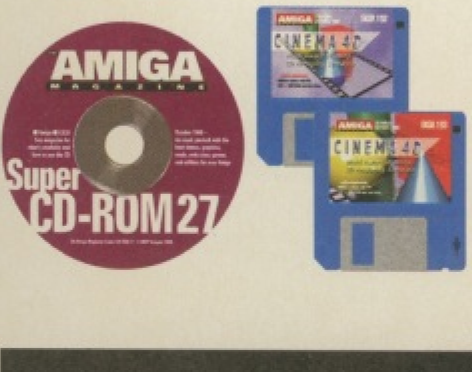


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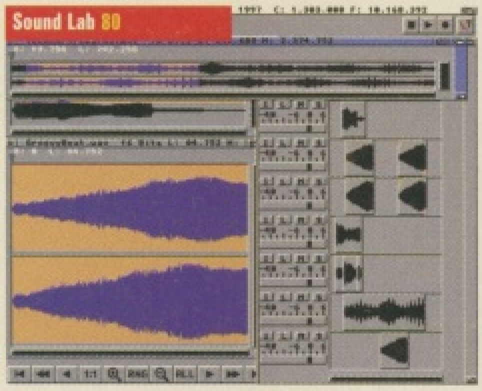
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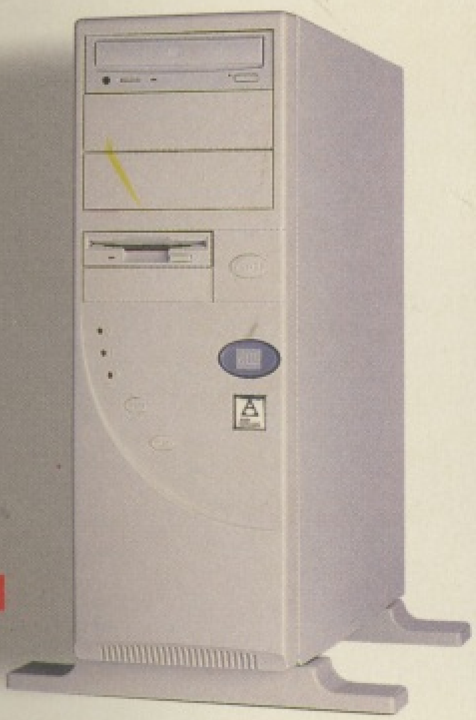




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EDITOR 'Techno' Tony Horgan
DEPUTY EDITOR Andrew Kosh
PRODUCTION EDITOR Rusty Cox
STAFF WRITER Richard Drummond bass
TECHNICAL CONSULTANT John T. Kennedy
US CORRESPONDENT Jason 'wordmachine' Compton
CD COMPILER Neil Koshwick
DESIGN Ben Munday, Mandy Rushton
CONTRIBUTORS Sjur Mathisen, Neil Bothwick, Jason Hulance, Dave Stroud, Chris Green, Dhomas Trenn, The World Foundry
PHOTOGRAPHY Rowan Isaac
SCITEX MANAGER Sarah Best
IT SUPPORT Paul 'MadMacs' Williams
SYSTEMS MANAGER Sarah-Jane Left.

Advertising, Marketing & Management

PUBLISHER Harry 'the hat' Attrill
ADVERTISING MANAGER Moaning Marianna Masters
MARKETING EXECUTIVE Zoe 'spacegirl' Wharnsby
GROUP PRODUCTION MANAGER Emma 'biker' Minford
AD PRODUCTION EXECUTIVE Natasha 'the flasher' George
ADVERTISING ASSISTANT Annabel Green
FACILITIES MANAGER Robert McBride

CU Amiga Magazine
37-39 MILLHARBOUR, ISLE OF DOGS,
LONDON E14 9TZ, UNITED KINGDOM
TEL: 0171 972 6700
GENERAL@CU-AMIGA.CO.UK
WEB SITE: www.cu-amiga.co.uk
SUBS ENQUIRIES: 01858 435350
ADVERTISING PRODUCTION FAX: 0171 972 6755

Contacts (not that there's much point now)

READERS' LETTERS AND TECHNICAL PROBLEMS: For general, non-technical, enquiries send your letters to the address above clearly marked for **BACKCHAT**. For technical problems send them clearly marked **Q&A**. Because of the nature of many enquiries they cannot be answered by phone. You can email us at **backchat@cu-amiga.co.uk** or **Q+A@cu-amiga.co.uk**.

PD REVIEWS: If you've written a PD program that you're proud of or you run a PD library and would like your disks reviewed in the PD post pages, send them to: **PD SUBMISSIONS, CU Amiga Magazine, 37-39 Millharbour, Isle of Dogs, London, E14 9TZ.**

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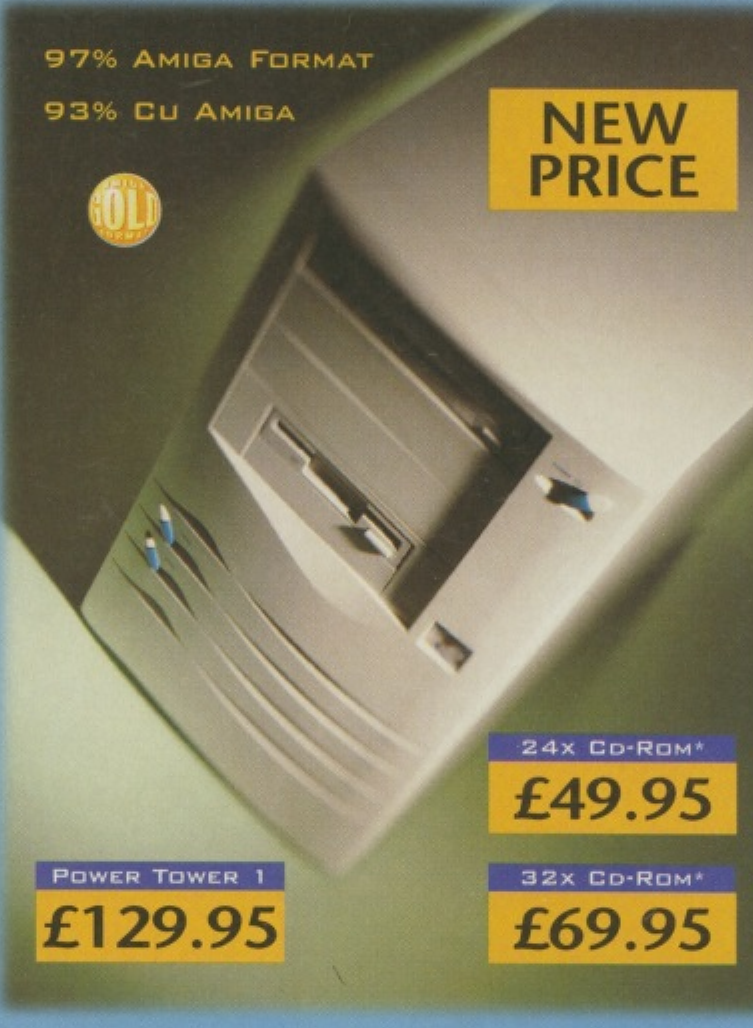
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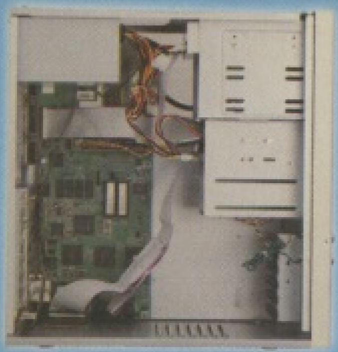
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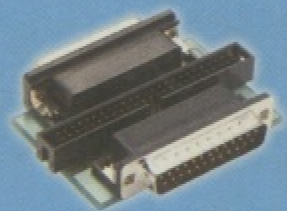
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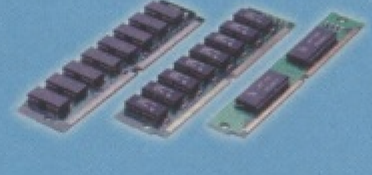
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Viper 630

- A600 Accelerator Card
- 68030 33MHz Processor
- Up to 32MB RAM (1 x SIMM)
- FPU Included, PCMCIA friendly

A600 0MB 33MHz **£75.95**
A600 4MB 33MHz **£85.95**
A600 8MB 33MHz **£95.95**
A600 16MB 33MHz **£115.95**
A600 32MB 33MHz **£150.95**



Special Offer Flicker Fixers

Monitor Bundles



Internal Scanmagic for **£49.95** when you buy a 14", 15" or 17" Monitor.
Scanmagic with internal flicker fixer **£79.95**

External Scanmagic

£99.95



AOC Monitors

- 3 year on-site warranty

14" Digital **£99.95**
15" Digital **£129.95**
17" Digital **£249.95**

Amiga Monitor

- Official 1084s inc. speakers

1084s Amiga Monitor . . **£119.95**
(Monitor not shown)



A1200 4MB RAM

- 4MB only not upgradable

A1200 4MB RAM **£39.95**
40MHZ FPU **£15.00**

A1200 0-8MB RAM

4MB RAM **£45.95**
8MB RAM **£55.95**
40MHZ FPU **£15.00**



RAM Upgrades

CDTV 2MB RAM **£49.95**
A500 2MB RAM **£49.95**
A500 1MB CHIP RAM . . **£19.95**
A600 1MB CHIP RAM . . **£24.95**
1 MB Mini Mega Chip . . **£99.95**

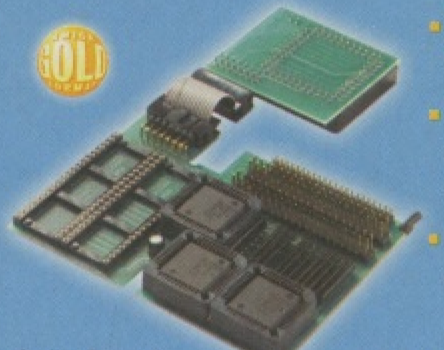
PHONE ORDERS We accept most major credit cards and are happy to help you with any queries. **CHEQUES/POSTAL ORDERS** Ordering by cheque/PO please make payable to POWER COMPUTING LTD and specify which delivery is required. **WARRANTY** All Power products come with a 12 month warranty unless otherwise specified. **TECHNICAL SUPPORT** Help is on hand with a full Technical Backup service which is provided for Power customers. **MAIL ORDER PRICES** All prices listed are for the month of publication only, call to confirm prices before ordering. **EXPORT ORDERS** Most items are available at Tax Free Prices to non-EC residents. Call to confirm prices. **BFPO** orders welcome. **MAIL ORDER TERMS** All prices include VAT. Specifications and prices are subject to change without notice. All trademarks are acknowledged. All orders in writing or by telephone will be accepted only subject to our terms and conditions of trade, copies of which are available on request. Please allow up to 7 days for cheques to clear before dispatching of the goods.

THE NEW POWER FLYER

Power strikes back again with a faster E-IDE Controller for the Amiga 1200. If you have recently bought a Hard Drive and you've probably realised that it is slower on your Amiga than on compatibles. Power can now solve that problem, thanks to the Power Flyer, a software and hardware solution which completely replaces the IDE controller of your Amiga 1200.

In PIO-4 mode it is possible to reach a maximum speed of 16.6MB/sec. Most drives will increase their transfer speed from 2.5MB/sec. to 7MB/sec.

Tested with most accelerator cards, we found that the best performance is achieved with Apollo cards. (especially the 68060 66MHz ones)



- Up tp 4 E-IDE and ATAPI devices can be connected
- Supports mode PIO-0, PIO-3 and PIO-4 (A1200 standard controller supports PIO-0)
- Meets specifications for ATA-3 and FastATA-2

Amiga Format "...this is probably the most significant hardware release of the year" **98%**

POWER FLYER **£69.95**

SCANMAGIC FLICKERFIXER

A scan doubler works by doubling the vertical frequency of the Video compatible Amiga modes (15KHz, Pal, NTSC and Euro36). The signal generated will then be displayed by any standard SVGA monitor.

The more expensive flickerfixer adds one extra feature to the ScanMagic. It eliminates the flickering from all interlaced Video compatible Amiga modes.

Nobody can stop you anymore from buying a nice, inexpensive, PC compatible monitor (check our prices and models, all sizes are available).

- Doubles the Vertical frequency of the Amiga PAL, NTSC and Euro36 video modes
- Allows you to use any standard VGA monitor with your Amiga 1200 and 4000
- Fits internally-easy installation
- VGA Adaptor included
- Pass through of all other modes

Internal **£54.95**
Internal inc. Flicker Fixer . . **£99.95**
External with Flicker Fixer . **£99.95**
ScanMagic External **£69.95**
VGA Adaptor **£15.00**



SCANMAGIC **NEW**



SCANMAGIC INT. **£54.95**

POWER MOVIE

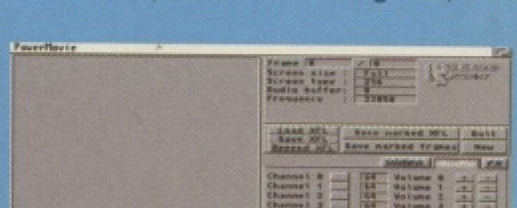
'The World of Amiga' show saw the launch of our most recent innovative product, Power Movie.

This product is a long awaited tool for easy Full Motion Video editing. We anticipate that it will be popular with the developers of Multimedia projects or videogames and whoever needs to put together thousand-frame-long 3D rendered animations with synchronised soundtrack/sound F/X and in need of playing the resulting animation in real time straight from a hard drive or CD-ROM. Each frame can be in 256 or HAM-8 colours and have a different palette.



POWER MOVIE PRODUCED

Power Computing is in the process of licensing PowerMovie according to its final use in order to keep its price down. Amiga enthusiasts will be able to buy the software with a cheaper licence for personal, strictly non-commercial use. Commercial usage requires a business licence for companies planning to use the software and the files it creates for commercial products i.e. video games, Multimedia, Info-Points, etc.



POWER MOVIE **£34.95**

COMMERCIAL USE **£TBA**

POWER CAMERAS

Power VDC100 and VDC200 Digital Cameras

Oliver Roberts, of F1GP Editor's fame, is the author of the Power DC, the software for Power's Digital cameras.

VDC-100 Technical specifications

- Image/Video: 250,000 pixel CCD 24-bit colour
- Resolution: 320 x 240 (standard), 640 x 480 (high resolution)
- Memory Stores up to 20 images (20 standard, 10 high or a mixture of both)
- Real Time Video in Black & White (NTSC)
- Shutter Speed: 1/60 to 1/16000
- Focus Range: 10cm to infinity
- Power Supply: 4 A4 1.5V batteries or DC Power adaptor

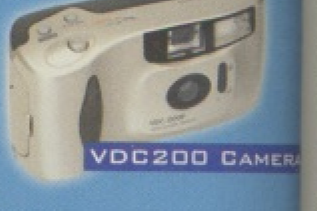
VDC-200 Technical Specifications

- Image/Video: 470,000 pixel CCD 24-bit col
- Resolution 320 x 240 (standard), 640 x 480 (high resolution)
- 45mm Colour TFT LCD monitor
- Memory: 2MB, stores up to 50 images (standard mode)
- Compact flash memory slot
- Built-in flash
- Real Time Video in colour (Pal)
- Shutter Speed: 1/60 to 1/4000
- Focus Range: 250mm to infinity



VDC100 CAMERA

89% Amiga Format



VDC200 CAMERA

VDC100 Camera £99.9
VDC200 Camera £199.9
2MB Flash RAM (VDC200) £49.9
4MB Flash RAM (VDC200) £TB
50 Alkaline Batteries . . £25.9

New software v1.2, existing owners send SAE for free upgrade!

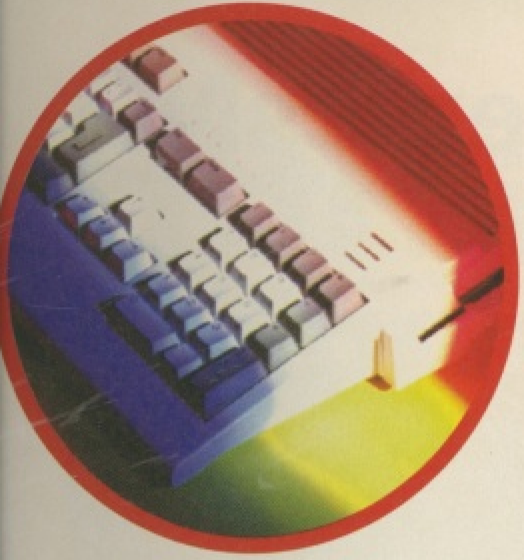
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http://www.powerc.com sales@powerc.demon.co.uk

PHONE 01234 851500

FAX 01234 855400

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UNIT 82A SINGER WAY
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News

CU Amiga Closes

This is the last ever issue of CU Amiga. The decision to close the magazine was taken by its publishers EMAP in light of its recent financial performance. Declining sales have forced the magazine into a position from which it can no longer turn a profit in its current state, and understandably EMAP is not prepared to continue publishing a magazine which consistently loses money.

While it may have been possible to make major investment cuts in order to regain profitability, it was decided that the magazine would be laid to rest with dignity rather than starved of resources and run into the ground. With no obvious short term prospects for growth in the Amiga market this would merely have been delaying the inevitable. While EMAP retains ownership of the magazine and its trademarks, there are no plans to relaunch the magazine in the near future.

The announcement of the closure was made on the Internet on August 17th, the same day that official UK magazine circulation figures were released for the first half of 1998 which show that CU Amiga is still the world's best selling Amiga magazine. Here is the FAQ document which was posted to the CU Amiga website:

FAQ

Q Why is CU Amiga closing?

A Because it is no longer making a profit and therefore cannot continue to be published.

Q How can the best selling Amiga magazine not make a profit when other smaller magazines manage to do it?

A Smaller magazines have different publishing set-ups, different costs and different distribution channels. Many are run at a slight loss or at break-even by dedicated people as extended hobbies. CU Amiga is published by a major magazine publishing company (EMAP), and as a Publicly Limited Company (PLC) EMAP must show its shareholders that it is making their money work, which means they cannot publish magazines that make a loss.

Q Why are costs not cut in order to save the magazine?

A We feel it is better to leave on a high note than continually reduce the size of the magazine, remove the disks, reduce staff and investment in the title to keep it going regardless of quality.

Q Surely though something can be done?

A We could reduce the magazine to a low quality pamphlet that was poorly researched and written but then it wouldn't be worth the £4.50/£5.99 cover price.

Q Why don't the staff all take a pay cut?

A Would you do the same? Where would it end?

Q Why have you lead us to believe the magazine would not close?

A We never did that. We have always been honest and said that there would come a time (if things did not pick up) when the magazine would no longer be profitable. No-one knew when that time would be. Only very recently did it become apparent that the time was now.

Q Is this a ploy to get Amiga users to buy PCs?

A No. CU Amiga's publisher has no PC magazines anyway.

Q Will "CU Amiga" be turned into "CU PC"?

A No.

Q I have a subscription. How do I get a refund on issues I will not get?

A You will be sent a cheque refunding the difference.

Q Why isn't the magazine sold to a publisher who can make a profit from it?

A Sacrifices would have to be made by any publisher that would compromise the magazine so that it would no longer be the CU Amiga you currently know.

Q Will CU Amiga return when the new Super Amiga is released?

A We hope so, although we cannot make any promises on that one. That decision will be in the hands of our (ex) publisher (EMAP).

Q Can I take this opportunity to thank the team for their dedication to the magazine and the Amiga community?

A Of course you can. Thank you.

Q And what about us?

A Well, there's always Amiga Format. Nick and Ben will look after you. We really are very sorry to have to leave you like this. We would all love to go on working on the magazine well into the future but it's just not possible. One way or another we'll be around when the Super Amiga surfaces, even though it most likely won't be a Class of '98 style reunion of the whole team under the old banner.

Q So is it time to pack the Amiga away for good?

A No! Keep on keeping on and we'll see you soon in happier times.

Schindler Talks

Jeff Schindler, the General Manager of Amiga, Inc, broke his three month silence this week with a message posted on the Amiga, Inc website.

Schindler talked about the delays affecting the planned announcement of Amiga's partners in OS5.0 and envangelised on behalf of the 'Amiga vision'. He told the story of how he and his children tried to install an adventure game on their state-of-the-art PC one evening, but gave up in anger and disappointment after two of hours of frustration. Schindler said:

'It really "sunk" in.... why the Amiga is different and why it's so important for us to reach our vision for the future Amiga and get it right. Thanks for your continued support and patience, you make Amiga what it is. Remember, its "adventures" like this that keep Amiga in our hearts.'

Amiga Inc's web-site can be found at http://www.amiga.com/

Microsoft bites Intel?

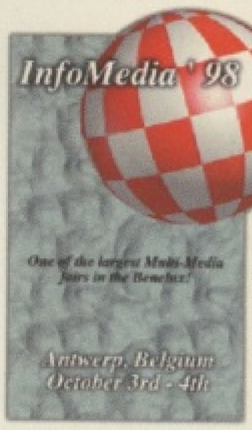
The US Department of Justice anti-trust case against Microsoft resumes on September 23rd with new allegations of Microsoft applying unfair pressure on CPU giant Intel.

According to an internal memo written by an Intel employee, an August 1998 meeting saw Gates pressuring the chip manufacturer into dropping a new series of multimedia extensions. The software, developed by Intel, was targeted by Gates for two reasons; a layer of OS independent code called Native Signal Processing and differences between the two companies' future development strategies.

Additionally, the Justice Department has collected evidence of OS-detecting code in the "Christmas beta" of Windows 3.1 which would show fake error messages if it was run on anything other than Microsoft's own MS-DOS.

Confidential messages written by Microsoft employees between September '91 and February '92 suggested that the final release of Windows 3.1 should malfunction on purpose if it was run on competitors' operating systems such as Digital Research's "DR DOS". In February '92, Vice President Brad Silverberg wrote in a memo: "The most sensible thing from the development standpoint is to continue to build dependencies on MS-DOS into Windows." The federal courts must now decide whether or not the findings were put into practice, or just an example of Microsoft's "tough talk".

Infomedia 98



Infomedia 98 is one of the largest computer shows in Benelux. This year's event will be held at the Bouwcentrum in Antwerp, Belgium on the 3rd and 4th of October and will feature two halls: one for PC and a separate hall dedicated to alternative platforms like Amiga, Mac and Linux. The 'alternative' hall is being organised by Waaslandia, the largest Amiga-only user group in Belgium, so will have a significant Amiga emphasis. Exhibitors planned for the show include Amiga International, Siamese Systems, Waaslandia themselves and the User Group Network.

Tickets may be purchased in advance for 250 BEF or £5.00 UK. For more information on ticket availability, travel, accommodation or stand hire visit the Informedia website at http://user.online.be/~waasland/infomedia98/ or contact:

Tony Mees on tel. + 32 (0)3 744 13 19)

PhotogenicsNG

Paul Nolan has announced the specifications of his new paint package Photogenics NG ahead of a major preview at the Computer '98 show in Cologne, although final release is dependent on other Amiga related commitments.



Features include:

- User configureable GUI
- Real time modification of colour, transparency, processing mode or position of any element.
- Natural media tools such as airbrush, chalk, pencil, sponge, water-colour, smudge and smear.
- Paint-on image processing allowing you to draw or brush on – or off – any effect.
- Advanced layer support with fade-erasing on right mouse button and unlimited number of layers.
- Paint-on pyrotechnics such as lensflares, fire, and explosions.

These can be combined with the smear tool to produce supernovas, waves of fire, and even sunsets and waterfalls.

- Open Architecture:

Photogenics is effectively just one big collection of plug-ins that blends seamlessly to form one program. 3rd party developers can have access to the same API as Photogenics does, allowing developers to extend the core software to an amazing degree. This also allows Photogenics technology to be embedded into other products.

- Fully Multi threading:

The GUI remains responsive while operations are in progress. Advanced Alpha channel support. Text Tool - allows text to be written straight onto any paint layer.

C64 lives again

Web Computers International take retro computing to new heights with the announcement of their Commodore 64 Web.it. The Web.it is designed as an antidote to today's complex and expensive PCs, being a user-friendly, console-sized computer designed to plug into your TV and be perfectly at home in the living room.

It will provide internet connectivity and has a suite of built-in software including MSDOS 7, Windows 3.1, Netscape's Navigator, Lotus AmiPro wordprocessor, Lotus 123, Lotus Organiser and a Commodore 64 emulator.

The Web.it is built around the AMD Elan microcontroller (a CPU derived from the 486) and has 16MB of RAM, a 3.5" 1.44MB floppy drive, serial and parallel slots, an IR controller and an integral 56k Rockwell modem.

The C64 Web.it is planned for release at the end of September and will retail at under US$400. More information is available from **http://www/webcomputers.net/**

H&P in Software Explosion

Haage & Partner have a number of major software projects nearing release.

AmigaWriter (previously EasyWriter) will be available about the time you read this magazine in both German and English editions, while upgrades to WarpOS and ArtEffect have just been made available. An entirely new version 3.0 of Art Effect is expected by the end of the year, and perhaps most interestingly, the long anticipated 68k emulator is said to be finished and stable. They will be offering it to companies wishing to make PPC only Amiga clones, but no further details of public releases are available.

Other major developments are the OpenGL/ Mesa libraries for 3D graphics cards and a StormC development. These include 68k and PPC versions of StormC, Storm PowerASM for PPC, StormWizard, the RKM guides, and a beta version of the 68k emulator, and will cost 498DM (698DM commercial) or about £160.

In Brief

Kickstart in a flash

Individual computers are developing Kickflash, a ROM swapper with a difference. It contains Flash ROM and enables you to exchange your normal Kickstart ROMs with a flash-upgradeable ROM image. Uses include compatibility with old software, and, more interestingly, cheap and easy upgrades to any new Kickstart version. More information can be found at Individual Computers new web-site at http://www.jschoenfeld.com/.

Cut Price Siamese

Siamese systems have decided to drop the price of the v2.5 software in anticipation of the affordable Ariadne 2 ethernet card. The price drops to a bargain £69.95. The serial only v2.1 software remains at £29.95. Purchasers under this scheme will still be eligible for a discount from the £399 price of the Siamese PCI card. See the Siamese Systems website at www.siamese.co.uk. or phone +44 (0)1525 210054.

AmigaSoc find users...

AmigaSoc UK, the UK representatives of the international User Group Network, have introduced a new web-based service to allow people an easy way of finding their local user group. Thanks to IMM studios, who lent AmigaSoc use of their postcode location database, they can now locate the nearest usergroup to within 5km of anywhere in the UK. Visit their website on www.uk.amigasoc.org.

With the closure of CU and the disappearance of the User Group pages, organisations like AmigaSoc are even more valuable resources for Amiga users. Sign up today!

... and take them to Cologne!

AmigaSoc UK is organising a trip to Cologne to join in the party at the Computer '98 show at a cut-price. Flight and B&B accommodation (in the Hotel Berg) will be included in a price expected to be just under £200. For organisational reasons, only user groups and developers or retailers will be included. If you want to take part but aren't in such a group, you'll have to join first! Bookings will need to be made by about the 20th of September, so move quickly. Email Andrew Elia on andrew@uk.amigasoc.org for more details.

Amiga gets Educational

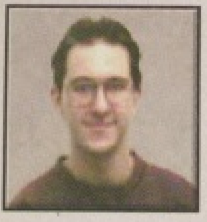


Alive Media Soft have announced the upcoming release of an Amiga conversion of Abidoo, a Macintosh educational package for 4-7 year olds. Coming on 2 CDs, Abidoo is a serious piece of software with a custom multimedia interface running in 640 by 480, so you will need a reasonably fast Amiga to run it – a graphics card is ideal. Abidoo contains a wide range of activities designed to be fully compliant with the National Curriculum. It has segments designed to help children at varying levels of development, and supports plug-ins for future additions. Sub games include a kitchen where virtual cakes can be made – or the recipe printed out – portrait and cartoon drawing games, jigsaw puzzles, and 30 assorted activities to improve reading and numerical skills.

Price and final release date have yet to be announced, for more information mail stevenalive@innotts.co.uk or phone +44 (0)1623 467579. Further details will be released in Alive's next catalogue, ask them to be put on their list.

Mystique Corp., who are also working on Amiga educational software, have a major update to their website, with more information about the Made for KiDS campaign and an outline of the plans for the next year and a half. According to MD Connor Kerr, "Months of work has gone into assessing the future of the Amiga in Children's/educational computing... the future looks incredible and we hope that you will all be there to help us usher in a new era for Children's computing." Visit the Mystique website at www.mystcorp.com.

Made For KiDS



Stateside News

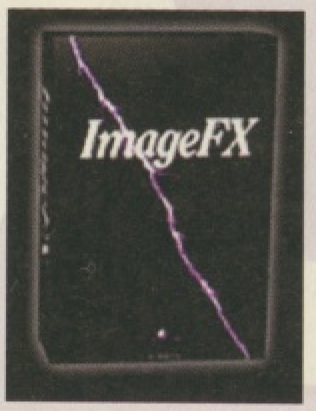
by Jason Compton: Editor in Chief of Amiga Report Magazine

And Then There Were Six?!?

One of Amiga Inc's first employees, fan favorite Joe Torre, has left the company. Torre, whose Amiga resume includes pioneering development of custom accelerator technology, Amiga animation for Hollywood films, a stint as president of the Amiga Atlanta user group, and a seemingly never-ending stream of "boing ball levitator" inventions, was one of the first recognisable names to Amiga fans after Jeff Schindler began to build his South Dakota team. Torre has been a mainstay of the Amiga Inc trade show circuit, and will be missed by his friends around the world.

No official reasons were cited for Torre's departure and he has not made any public statements since going on vacation in July, but it has been theorised that a hardware engineer was not a good fit with Amiga Inc's predominantly software focus. As of this writing, Amiga Inc now has six acknowledged employees.

Nova Design Releases ImageFX Update





Bugs are the stuff of life, but Nova Design continues to clean up after theirs. The latest update to the ImageFX, version 3.2, has been released. This revision cleans up some image format handling, augments the new layers capability, and enhances the built-in ARexx and drawing tablet support.

For ImageFX 3.x users, the update is free. IFX 2.x users can use this opportunity to upgrade for US$80 (about UKP50), and earlier users (including CU coverdisk owners) can move to 3.2 for US$125 (about UKP75). For more details, contact Nova Design at www.novadesign.com.

Amiga Evangelist Tackles Fast Food



It's not likely a coincidence that the Amiga has attracted a fair number of people interested in campaigning for a cause, and it shouldn't be too surprising if some Amigans see our computer as just one of many causes they champion. Pat Fish, who last made news going after Be Inc's Jean-Louis Gassee over what he perceived to be a condescending attitude towards the Amiga a couple of years back, is hammering away at fast food giant Wendy's for false advertising. Apparently Fish discovered that Wendy's was being far less than honest about a product it promoted as vegetarian, and since being exposed has not necessarily taken the steps it promised to rectify the solution. German TV came to interview Mr. Fish, who made very certain his surroundings were covered in Amiga merchandise and memorabilia.

SoftSynth Frees JForth

Sometimes lost in all the excitement over Java and whatever new languages people can invent this week are the time-tested and proven languages that sometimes fall by the wayside because they don't make front-page news. If you're interested in programming in Forth, a very powerful and scaleable language, your life has been made a lot easier by SoftSynth, who have released JForth as freeware. First released commercially in 1986 and maintained for the better part of a decade, you can now break in for no investment but your time. Check: www.softsynth.com/jforth for downloading instructions. Although SoftSynth will not provide any technical support, a JForth support mailing list will. To subscribe, write to MDaemon@ChaosSolutions.comwith "subscribe JForth" in the body of the message.

Super CD-ROM 27



Welcome to CUCD27. This CD is crammed full of programs, games, utilities, mods and a host of other goodies. If you don't yet have a CD drive, this is your reason to buy one. Prices have never been lower and 650MB of quality software each month is just too good to miss out on.

How much of what?

Cinema4D	34MB	PowerPC	21MB
Goodbye	62MB	Magazine	47MB
CDSupport	50MB	Online	14MB
System files	13MB	Programming	13MB
CDROM	18MB	Readers	42MB
Demos	44MB	Sound	64MB
Games	100MB	Utilities	26MB
Graphics	32MB	WWW	58MB

Making the most of CUCD 27

All CUCDs are designed to be used whether you boot from the CD or your normal Workbench. If you boot from the CD, everything is setup and ready to go. If you want to access the CD from your Workbench, you should first run InitCD. This sets up various assigns and paths needed by programs on the CD, so if you don't do it, things won't work. It doesn't make any changes to your system, or write any files to your hard drive, all changes are temporary and can be reversed by running InitCD again. The error some people were experiencing with updatecopy has been fixed now, and the fix means that you won't see the error again, even with older CDs.

Your own custom CD

In the past you had to use whatever file viewers we set up on the CD. since these had to work with all Amigas they were quite limited. From CUCD12 we decided to allow you to specify how the CD should work on your Amiga and included CDPrefs in the CDSupport drawer. If you have never run this before you should be asked if you want to when you run InitCD. CDPrefs lets you specify which program you want to use to handle each type of file, graphics card users can view pictures in full 24 bit colour, ProjectXG users can listen to midi files through their midi card, people with sound cards can listen to mods with an AHI module player and PowerPC users can use the fast file viewers and mpeg players available for their machines. It also means we were able to provide different defaults for Workbench 2.x users.

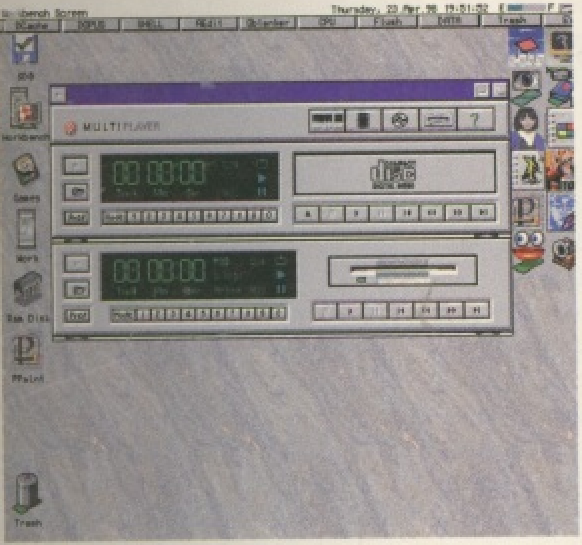
Once you have run CDPrefs, your settings will be saved to your hard drive and will be used every time you use this CD or any other CUCD.

Some people had problems with the original use of IDer, partly through a lack of understanding of how it worked and partly through a lack of explanation from us. All icons now use CUCDfile as their default tool, and the previous IDer problems should be a thing of the past. InitCD now copies CUCDfile and it's configuration to your hard drive, if it's not already there. This means that files copied from the CD will now work without needing the CD present. You will almost certainly need to run CUCDprefs to set it up to use your own viewers, but you should do that anyway as it will result in faster access. If you do have any problems, make sure you have run InitCD, at least once.



Finding what you need

The CUCDs have long been equipped with basic search facilities for the CUCD and Aminet CD index files. Now there is a new SearchCD program that covers both CD sets from a single interface. You can select which type of CDs to search, and select individual CDs or all CDs for searching. A progress bar informs you of the status of the search so there's no more staring blankly at a busy pointer. This needs Workbench 3.x so the old search tools have been left on the CD for WB 2.x users.





Making things work

Wherever possible, we have tried to make software work straight from the CD, this isn't always possible for a number of reasons. Some programs need to be installed to your hard drive to work, often requiring specific system files. These files are usually on the CD so running InitCD often helps here.

Most software contains a list of system requirements in the documentation, and some will not run unless you have the required processor, memory operating system version or chipset. Some programs, particularly demos and games are written in an OS illegal way. This can mean they only work on specific machine specifications, sometimes the readme states this, but not always. Many demos are intended to be run for a shell, the icons we add simply start them from a script. In some cases this will not work, especially demos that need a lot of Chip RAM. In this case you will need to boot without startup-sequence and run the program from the shell. Your Workbench manual should explain how to do this. ■

Neil Bothwick





Highlights of this month's CU Amiga CD?

WCP
CUCD/Utilities/WCP

Customisation is a complete collection of icons, sounds and backdrops to enhance the appearance of your Workbench. The icons use the palette remapping system of NewIcons but have their own, unique, style. A particular feature of the icon design is the way it highlights icons to leave you in no doubt as to which are selected.

StrICQ
CUCD/Online/StrICQ

ICQ has become incredibly popular in a very short time, but their has been no Amiga port. Now there are a few, but StrICQ is the best, and the only one that doesn't require the use of another computer for the initial setup.

Wasted Dreams & EvilsDoom
CUCD/Games/Wasted Dreams & CUCD/Games/EvilsDoom

Two exclusive demos that arrived just in time for the final CD.

Amideck
Graphics/Amideck

This is a prototype of a new multimedia program. The concept is to use a single interface to handle many types of data such as images, audio files and CD audio tracks.

NewsRog
CUCD/Online/NewsRog

Try the demo of the new news reader, reviewed this month.

www.thule.no
CUCD/WWW/http/www.thule.no

Dave Haynie has uploaded some documents from his days as a senior engineer at Commodore. This gives an intriguing insight into the workings of Commodore, some useful technical information and a glimpse of what might have been had the Amiga been managed differently. some of the files are scanned documents in pdf format, you can view these with xpdf in the C directory of the CD. These should have been on last month's CD, but are definitely here this month.

Putty Squad

A demo of Putty Squad arrived minutes before mastering the CD. It came as a DMS but I couldn't get it to run on my 4000/060 with or without caches disabled. The DMS file is on the CD, you can unpack it from a shell with: cd CUCD27: c/DMS write PuttySquad DF0:

PhatTrax
CUCD/Sound/PhatTrax

Another collection of high quality samples for use in your own compositions.

COVER DISKS

Cinema4D



The original Cinema4D CD contains over 470 MB of data. We magically shoe-horned the package onto two floppies - but it's a drastically cut down version. If that isn't an incentive to buy a CD-ROM drive, what is?

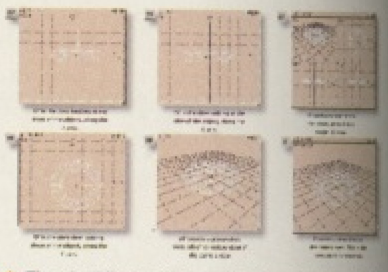
Most notably the floppy disk version supplied requires an FPU to run – that is, you must own an 020 or 030 processor with an external FPU, or have an 040 or 060. A lot of the example textures, objects, fonts, etc. had to be removed to cram this program onto the disks. For more information on Cinema4D read the following pages.

Installation and setup

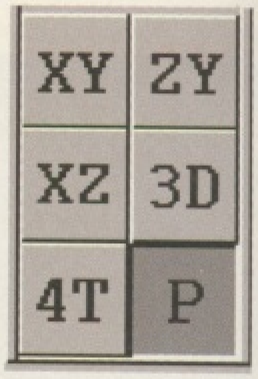
To install Cinema4D, first boot up your Workbench. Insert disk 192 and double-click on its icon. Drag the icon called "Drag_Me_To_HD_and_Click" to a temporary location on your hard drive. Alternatively, if you have about 4MB of free memory, you can drag it to your RAM drive instead. Double-click on this icon and the Cinema4D archive will be unpacked. About half way through you will be prompted to insert disk 193. When finished, update the window where you copied the icon and you will see a Cinema4D drawer. Open this. You can now launch the the Cinema4D installer by double-clicking its icon - this will install the program to your hard disk. When asked which version you wish to install, make sure you select the FPU version.

The Amiga seems to have reached saturation point with 3D packages, but Cinema4D is unique. Unlike other packages, Cinema4D uses the standard Amiga user interface. The result is a clear, easy to use program which leaves the others standing in terms of ease of use. Not that Cinema4D lacks features or rendering power as a result: far from it, as it's still one of the most useful and creative graphics programs you can use.

Cinema4D allows you to quickly create complex scenes, and then render them making full use of any extra hardware you may have invested in. Graphics cards, accelerators, FPUs – even 68060 processors are supported directly. This is one software application which will help push your hardware to the limits.



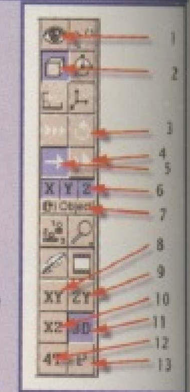
▲ The six different Cinema4D viewpoints Genesis is now connected to the internet and ready to go. Note the new displays of connect speed and online time.



◀ Swap view modes with these important buttons.

The Toolbar

The Toolbar provides quick access to all the tools you will use to create and edit objects. Cinema4D makes a slight alteration to the standard user interface, so it's vital you notice that some buttons have a little triangle at the bottom. These buttons have extra functions: click on them with the right mouse button to see them. Some menu options have a dot after them - hold down the shift key while you select these to bring up a preferences window. Here are a list of key buttons and their purpose.



1. Click here to alter the viewpoint of the entire scene.
2. Click here to alter the position, size or rotation of an individual object.
3. Click here to Rotate an object. You need to select the Axis around which to rotate.
4. Click here to Scale an object. The default is to scale in all directions, but it's possible to select axes individually.
5. Click here to Move an object. Drag with the left mouse button down for up/down, left/right. Drag with the right mouse button held down for in/out.
6. Click on these buttons to determine the axis for scaling and rotating.
7. Click here to cycle between an object's own axis and the main display axis when rotating or moving an object.
8. Select a front view
9. Select a side view
10. Select a plan view
11. Select a 3D view
12. Select front, side, plan and 3D
13. Select the camera (perspective) view

Getting Started

When you start Cinem4D, you'll see a single window displaying a grid. This grid won't appear in any renders you make: it's only there to help you find your bearings. As with all 3D programs, it's important that you grasp the concept of axes. The Y axis is the "up and down" direction, the X is the "left to right" and the Z is the "in and out" of the screen.

The cluster of six buttons at the bottom of the toolbar allows you to switch between one of six view points. Three view modes are "flat" (ie; two dimensional) views, two are 3D views and one is a mixture of both. You can swap between these modes at any time, so simply pick the one which gives you the best view.

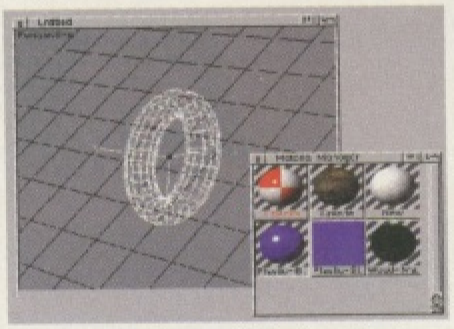
Textures and Appearance

When you first create an object in Cinema4D it's bland and white by default. To make realistic renders you can alter the appearance by creating different "materials". When you render in Scanline or Raytrace mode, you'll see the difference at once.

There are three ways of altering the appearance of an object, although all are brought together to create a single "Material":

1. You can adjust the object's physical attributes. These include colour, transparency, Reflectivity and Luminance. For simple objects, such as a snooker ball, pane of glass or pool or water, this is how you would control their appearance.
2. You can map a texture to the object. For example, you can create a chequered floor by applying a tiling pattern, or create a picture in a frame by applying a scanned photograph as a texture. These textures are simply ordinary images such as those created by any Amiga art program.
3. You can create a "bump map". Again, this is an ordinary flat image, but this time the intensity of the image is used to create bumps in the object. This is a great way to add realism to objects: for example, adding craters to a planet, or dimples to an orange.

Applying a material to an object is easy. First of all, open the Materials Manager window from the Windows/ Material Manager menu option. This displays the currently available materials, which you can apply to your object. Load some more, by using the Material/ Load menu option. Cinema4D comes with a collection of Materials which you can use. You'll see them appear in the Manager window once they are loaded.



▲ The Materials Manager window lists all the textures you can apply to your objects.

To apply the material to your object, select it in the Materials Manager window. Then make sure your chosen object is highlighted, and pick Apply from the Material menu. This will cause the chosen object to appear in renders as though it were covered in your material.

For best results, you will want to edit the material so that it suits your exact needs. Cinema4D offers extensive control over the materials: you can adjust the colour of



▲ Apply new materials to objects to make them more interesting.

course, but also the physical attributes (to make an object appear hard, soft, shiny or transparent). You can also load in your own textures (standard IFF images) and even make them "bumpy".

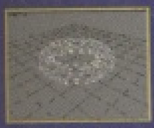
All this is possible by editing the material: and to do this you only need to double-click in the material in the Materials Manager window. If you don't want to alter an existing material, create a new one first using the Material/New menu option. ■

John Kennedy

(More Cinema4D on Page 22)

Creating a simple scene

To help you get to grips with Cinema4D, here's a short step-by-step guide to creating and positioning an object. Refer to the Toolbar buttons key to learn how to switch the various options on and off.



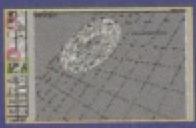
Start a new project, and select "Torus" from the Object / Primitives menu to create a new object. Cinema4D defaults to the 3FD view, with the "Move" button switch on (the arrow) and the Edit Entire Work Area option.



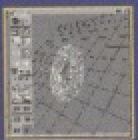
Hold down the left mouse button and drag the mouse, and you can move the entire grid (including the object) left and right, up and down. Hold down the right mouse button and the display zooms in and out. Zoom out far enough, and the camera appears in the scene.



Now click on the Rotate button (indicated) and try clicking and dragging again. This time you can spin the view around in order to get a better view. You can rotate the view in this way from the 3D views, but only move in the flat views.



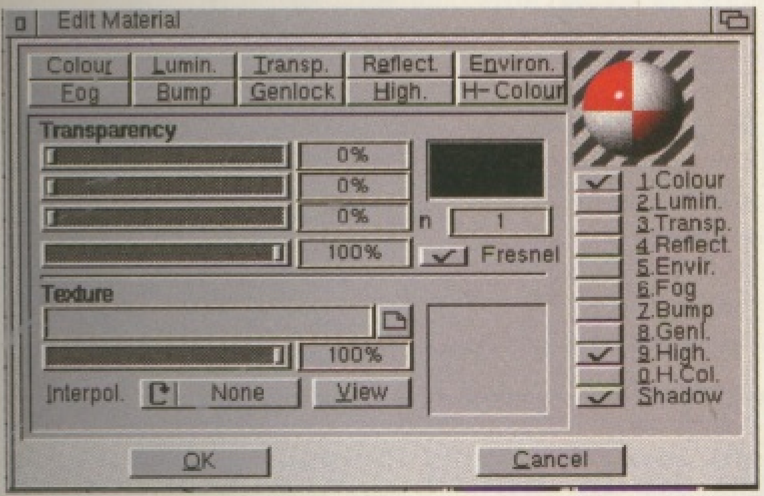
It's possible to deal with individual objects – rather than the entire scene – in the same way. Click on the Edit Object button beneath the Eye button and then on the Move switch. Now you can drag objects around the screen in any view you like. Toggle the X, Y and Z buttons and movement is limited in the direction of the object's axis.



You can rotate an object in the same way, and this time the X, Y and Z buttons determine around which axis the poor object is to be spun. Remember, it's going to spin around the internal axis of the object, unless you click on the cycle gadget and pick "World".



The P view is the view from the camera, so when you Render the scene this the view point which will be used. Try it now: the Render button is the toolbar button which looks like a piece of film: click it and select a render mode such as Mono-chrome shaded to see your shape.

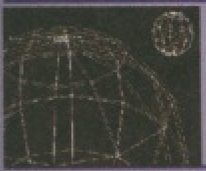


▲ Create your own materials from scratch, or edit existing ones.

Rendering Modes

Whenever possible, Cinema4D always renders images with 24bit accuracy. This means that there could potentially be over 16 million colours present in the rendered scene. Unfortunately, unless your Amiga is fitted with a graphics card, it's not possible to display these wonderful 24bit images directly, although it's possible to get pretty close if you have an AGA Amiga. Cinema4D has six rendering modes, each one producing more detail than the last. You select the one you want by clicking on the Render button in the main tool palette.

1. Monochrome Wireframe



This mode is perfect for testing animations. Objects are rendered only in black-and-white outline form. This is the fastest rendering mode available.

2. Wireframe



Similar to the monochrome mode, except different colours are used for the outlines, depending on the colour of the object. This can help when previewing a complicate scene.

3. Monochrome Shaded



One step up from the wireframe, and now objects are "filled in" and look more solid. Still fast, and a good way to preview any animations.

4. Colour Shaded



With this mode, you start to get a feel for the finished image. However, there will be no transparency, reflections or shadows.

5. Scanline



The first rendering mode capable of generating 24bit graphics, and in many cases good enough for finished images. Colours and textures are rendered properly, and round objects appear smoothed.

6. Ray-Trace



This is the most accurate (and slowest) rendering mode. It uses a physical model of how light travels to create shadows, as well as complicated reflection and refraction effects.

There's more!

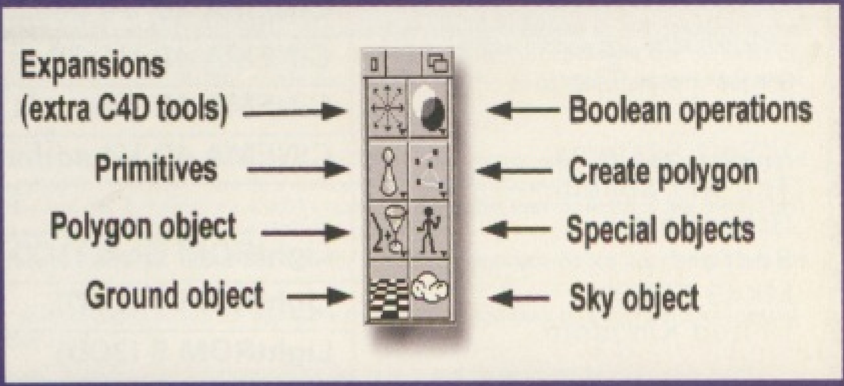
Cinema4D is such a powerful program that we have barely begun to scratch the surface of what it's possible to achieve with it. There are powerful animation tools, point and surface editing, landscape generation and text options. Although for obvious reasons we won't be able to bring you a monthly tutorial series on using Cinema4D, you'll be pleased to know that Amiga Format will be including some tips and tricks in future issues.

Extras

Getting the lighting can always be a chore when rendering a scene. With Cinema4D you can create as many light sources as you want, and scatter them around your scene to provide illumination. Shadows can be calculated when Ray-trace mode is used, and these will provide an incredible degree of realism to your work. However, the easiest way to get started is to select Sun from the Objects/Special Object menu. This quickly provides a yellow-y lightsource high in the sky to provide your scene with illumination. You can always go back later and change it if you need more control.

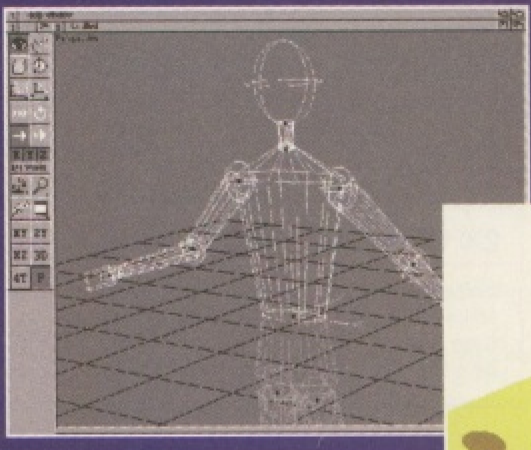
The Object bar (Windows/Object Bar) provides useful shortcuts to get to important tools. Leave this window floating on your desktop and you'll speed up editing of complicated scenes.

▶ Advanced users will appreciate the floating Object bar, which provides quick access to tools.



When creating 3D scenes, it's often desirable to have a human being present to provide a sense of scale. This is especially true if you are designing a building, room, car or another "real world" object. C4D makes it easy to add a human being by doing all the hard work for you - you only need to select Object/Special Objects/Figure.

What's more, it's very easy to pose the figure because it has been already defined as an "Animation-ready" object. When you select the Drag function in the main toolbar (the three arrow button) you can easily rotate the figure in a realistic way. Select the arm joint, and the entire arm including the hand will move. Select the torso, and the head, chest and arms will all move as well.





▲ The C4D dancing humanoid can provide hours of entertainment.

The version of Cinema 4D included on this month's CUCD is the full v4, the latest - and unfortunately the last – version available for the Amiga. It includes the CinemaWorld and CinemaFont add-ons, examples and so on. There is plenty more that you might need, however, so HiSoft have put together a range of special offers to make your life easier.

First of all, you can purchase the Cinema 4Dv4 CD itself. You might think that this is a strange thing to suggest, but the fact is that there are quite a lot of extras on the CD. The Cinema 4D CD has almost 500MB in total on it. Obviously we did not want to put all the extras on our cover CD or there wouldn't have been room for anything else. If you want all the extra textures, scenes, objects and example animations, you'll find £5 a very fair price to pay! For purchasers of the floppy disk edition, you'll find that there is quite a few little bits we had to chop out to make it fit on the disk. The CD edition contains far, far more.

To get the most out of your rendering, you'll need to know the ins and outs of the package. You can buy a full manual for £15 or if you have an older version of Cinema 4D with the manual, you can get the v4 manual addendum for £10.

There are also offers on the LightROM CD-ROM series for people who want to expand their collection of objects for use in Cinema 4D. The LightROM is a highly rated collection which contains a wealth of objects for you to use or abuse in your own work. There are many sample images showing you what the objects are like. The LightROM CDs concentrate mostly on Lightwave objects but these can be converted to Cinema 4D format with the MagicLink program included on the coverdisk. They also include large collections of textures and image maps.

Finally, a couple of small extras: Personal Paint for drawing your own textures, and CD-ROM drives if you need one to get the CDs running.

HiSOFT SYSTEMS

CINEMA 4D

Fill in this form and send it with a cheque or postal order to:

HiSoft Systems,
The Old School,
Greenfield,
Bedford,
MK45 5DE,
United Kingdom.

Credit Card orders can be accepted using Visa, Mastercard or American Express. Switch and Delta debit cards also accepted.

For credit card orders, call 0500 223 660 or +44 (0)1525 718181.

Please note that all these special upgrade offers expire 30/10/98.

Tick here to receive information about the PC versions of Cinema 4D. ❑

Tick here to receive information about the MAC versions of Cinema 4D. ❑

HiSOFT SYSTEMS

The Old School, Greenfield, Bedford MK45 5DE, UK
tel +44 (0) 1525 718181 • fax +44 (0) 1525 713716
www.hisoft.co.uk • www.cinema4d.com

NAME	PRICE	QUANTITY	TOTAL
CINEMA 4D manuals (inc V4 addendum)	£15		
CINEMA 4D V4 addendum	£10		
CINEMA 4D V4 CD	£5		
CINEMA 4D manuals + V4 CD	£18		
CINEMA 4D V4 addendum + V4 CD	£13		
LightROM Gold (1CD)	£14		
LightROM 4 (2CD)	£19		
LightROM 5 (3CD)	£29		
LightROM 6 (4CD)	£29		
LightROM Collection (10CD)	£79		
CINEMA 4D manuals + LightROM Gold	£25		
CINEMA 4D manuals + LightROM 4	£30		
CINEMA 4D manuals + LightROM 5	£40		
CINEMA 4D manuals + LightROM 6	£40		
CINEMA 4D manuals + PPaint	£35		
Personal Paint 7.1 CD	£24		
2X CD-ROM DRIVE in slim-line case	£49		
2X CD-ROM DRIVE with SquirrelSCSI	£79		
2X CD-ROM DRIVE with Surf Squirrel	£109		
Shipping: Please note that postage and packing must be added as follows:Postage is £2 for the first item; add £1 for each additional item up to a maximum of £4.CD-ROM drives and large orders will be sent by courier: £4 for 2-3 day service, £6 for next working day.	Subtotal	£	
	Post/packaging	£	
	TOTAL	£	

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EYELINE *Bringing you the latest Amiga News from Eyetech*

Latest News in Brief

EZRe-Writer Introduced

Following closely on the success of the EZWriter, Eyetech has introduced the EZReWriter for A1200, starting at just £279.95 for the Tower version.
The unit, which will read and write to conventional Gold CDROMs as well as CD rewritables, comes complete with MakeCD software and one CD rewritable disk.
An external version with 100W Power Supply, the EZReWriter-*SE*, is also available for just £299.95.

External EZWriter-*SE* now available for £269.96

Eyetech has introduced an even lower cost version of the EZWriter, the EZWriter-*SE*.
The unit comes complete with MakeCD software, colour-matched case and 100W power supply. 10 Blank CDR recordable disks - each storing 650MB - cost just £10 when bought with any EZWriter product.

EZGen Low-Cost Genlock

This month sees the release of Eyetech's EZGen, low cost composite video genlock for the Amiga range priced at just £99.95.
It allows Amiga Graphics from, say, Scala MM300, to be overlaid on live video from a camcorder and the resultant signal re-recorded to videotape.

Special Promotion on 30-bit Flatbed Scanner

Buy an award-winning UMAX Scanner and Photoscope Software Bundle from Eyetech before the end of October 1998, and get a fully registered copy of ArtEffect-SE 1.5 (normally £59.95) completely **FREE OF CHARGE**.

Monitors down in price

Following recent reductions in the price of monitors you can now buy a brand new 14" digital monitor, complete with internal A1200 Scandoubler for under £145.
Please see the panel on page 2 of this advertisement for further details.

Amiga Magic Upgrade Packs

Now Available (Limited quantities only)

The ideal way to bring your Commodore A1200 up-to-date:

- 3.1 Kickstart ROMs
- 3.1 Workbench (6 disks)
- Wordworth 4.5 SE
- Turbocalc 3.5
- Datastore 1.1
- Photogenics 1.25E
- Personal Paint 6.4
- Organiser 1.1
- Pinball Mania & Whizz Games
- Magic Pack Software Manuals

. . . . ***and all for just £49.95!!***

EYELINE BACK ISSUES

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- ☐ EZWriter/EZRewriter CD Writers
- ☐ Siamese System RTG2.1 & 2.5 Upgrades
- ☐ CDPlus-*SE* Award-winning A1200 CDROMs

If you would like copies of any of the features covered in previous issues of Eyeline - please send a copy of this coupon together with a stamped addressed envelope to:

Eyetech Group Ltd, The Old Bank, 12 West Green, Stokesley, N. Yorks TS9 5BB

And so, farewell then ...... Cu later?

Like most of our fellow Amiga dealers and customers, we would like to say a big thank you to Tony, Andy, Richard and the rest of the team for giving the Amiga community such enthusiastic and informed support over the last few years.

We are sorry to see you go - but look forward to seeing you back with a renewed vigour when the new Gateway Amiga A2-1000 Millenium Edition (as previewed in Cu Amiga's September 1998 issue) really takes off.

In the meantime, we at Eyetech will continue to support Amiga users worldwide with great products, terrific prices and service that is second-to-none, and to support the Amiga press with advertising and new products for review. And yes, (for those that have noticed) we promise that we will update our website more regularly from now on .....

However . . .

We thought we just could not let this final edition of CU Amiga go by without a significant memento. So here it is ..... the EZTower SLE (Souvenir Limited Edition).

The first 108 people (that's the number of pages in this souvenir issue of CU Amiga) can buy an EZTower SLE for just **£99.95** (inc. vat).

The package includes:

- Full DIY* EZTower (capable of taking your A1200 and a PC Motherboard)
- PC Keyboard
- EZKey keyboard adapter
- Floppy drive faceplate & drive extension cable
- Full pictorial assembly & installation instructions.

EZTower-*SLE* only £99.95 LIMITED STOCKS



This offer is strictly limited to a first come, first served basis so if you are thinking of towering up your A1200, now is the time to act.

*(*or you can buy a ready assembled EZTower for just £10 extra)*

THREE DIFFERENT IDE INTERFACES BRING LOW COST RELIABLE EXPANSION TO EVERY A1200

When the Commodore engineers developed the A1200 in the early 1990's, they had the foresight to include an IDE interface so that (relatively) low cost PC notebooks hard drives could easily be fitted. However, back then no-one ever envisaged that, six years on, A1200 owners would want to attach multiple hard drives, CDROMs, removable cartridge drives - and even CD burners such as the EZWriter - to their machines.

What Commodore left out of your A1200

However the A1200's built-in IDE interface is minimalist in the extreme. As the Commodore design engineers only ever envisaged factory-fitted 2.5" internal hard drives being used in the A1200 - and then connected to the motherboard by a ribbon cable no longer than 2cm, they saved costs by wiring the IDE connector directly to the A1200's main data bus, rather than via buffered line driver chips used by virtually every other computer (and as required by the relevant IDE/ATA standards).

All three IDE interfaces supplied by Eyetech - the EZCD-SE, EZCD-MK2 and the IDE-Flyer - put back the bits that Commodore left out - and more. All three interfaces provide:

- the 'muscle' to drive the voltages on the wires of the CDROM/HD data cable from 0v to 5v and back at up to 3 million times per second (or up to 16MB/s for the IDE-Flyer)
- a 'gateway' between the A1200 data bus and the IDE/ATAPI peripherals so that data is sent received on the cable only when needed (and not continuously - whether relevant to the IDE/ATAPI devices or not - as with the standard A1200 IDE connector).
- the isolation of the Amiga custom chips from the IDE/ATAPI devices and cables to help protect your Amiga's custom chips from damage caused by a failure of components on the IDE chain.

In addition, all three interfaces allow you to add up to 4 IDE/ATAPI devices to your A1200 by creating two separate IDE channels, each capable of supporting a master and (compatible) slave device.

Why three Interfaces?

In many computers the internal timing mechanism is the most critical area for overall system stability. Any mismatch between the timing signals generated by the computer, and those expected by any attached peripheral - such as a hard drive or CDROM - can result in data corruption, or just failure to operate at all.

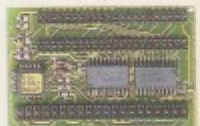
As you might expect, the faster the system and peripherals, the tighter are the tolerances on the timing signals of the A1200 and its accessories. In fact, for highly specified systems, the 'normal' data bus buffering (eg in the EZCD-SE interface supplied by Eyetech, and the buffered interfaces supplied by most other Amiga dealers) has to be supplemented by 'active pull-up' technology and extended to all interface signals - data and control.

Finally although the EZCD-MK4 interface provides more than sufficient performance for most people, if you really want to get the absolute maximum performance from your IDE peripherals you will need to bypass the A1200's internal IDE port completely and start from scratch. This is exactly what the Elbox IDE-Flyer does.

Which Interface is best for me?

At the last count there were around 12 different A1200 motherboard revisions produced by Commodore, and many variations within these due to chip level revisions. Couple this to the different mix and variety of peripherals that individual A1200 users fit to their machines and you have nearly as many different A1200 systems as there are users. All this means is that it is not possible to be definitive about which interface is going to the the most suitable for your system. However, Eyetech's unique compatability promise allows you the full purchase price back against your interface (less carriage) against a more highly specified interface - should you need it - within 30 days of purchase. As a general guideline you should choose the interface for your system as follows:

Interface	Price	Suitability
EZCD-SE	£24.95	030/33 Accelerator (or slower/none)
EZCD-Mk2	£38.95	030/50, 040/xx, 060/xx
IDE-Flyer	£59.95	040/xx, 060/xx, UDMA hard drive & 24speed+ CDROM

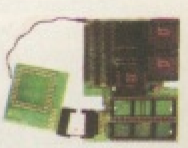


Eyetech EZCD-SE

I feel the need - the need for speed

If you really want to have the best possible performance then you need the Elbox IDE-Flyer - in Amiga Format's tests it boosted performance of some hard drives by up to 600% - they rated the product at 98%. But ..... if you do decide to go this way you really need to make sure that the rest of your system is up to the job as well - otherwise you will have wasted your money. Before ordering the IDE-Flyer, you should make sure that:

- Your A1200 is in a tower, with an adequate power supply (over 150W).
- You have a high-end accelerator capable of making use of all the data you throw at it.
- If you have a Commodore-manufactured A1200 with a revision 2B or 1.D.4 motherboard you have had the manufacturing timing faults corrected. (We can undertake this work for a fixed charge of £30).
- You have a modern (under 1 year old) 3.5" hard drive and CDROM capable of supporting PIO Mode 4.
- You feel confident about installing the IDE-Flyer. This involves some aptitude in DIY electronics, although no soldering is required.
- You are using application programs which will benefit from the faster data transfer.



Elbox IDE-Flyer

The IDE-Flyer also allows hard drives over 4.3GB (the largest supported by the ROM-based FastFileSystem) by 'partitioning' these drives into virtual drives each of less than 4.3GB.

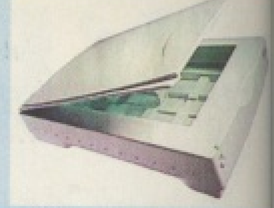
New products & special prices for this issue

DIY EZ-Tower+PC kbd+kbd i/f (Limited quantity) - £99.95; 170MB Hard Drive A1200 Magic Pack £228.95; 14" monitor+scandoubler £143.95; EZWriter-SE external CDROM burner+MakeCD £269.95; EZReWriter-SE external CDROM rewriter+MakeCD £299.95; Scandoubler with full flickerfixer (int or ext) £89.95; Elbox IDE-Flyer High-speed 4 dev buffered i/f £59.95; CamControl digital camera software £29.95; Award winning Umax SCSI scanner w/PhotoScope and FREE ArtEffect-SE v 1.5 £179.95; 32MB mem £29.95

Award-winning UMAX SCSI flatbed scanner with Amiga PhotoScope software - just £179.95

- 600x300 dpi optical resolution, single-pass 24-bit A4 flatbed scanner
- Comes with Photoscope (Amiga) and Mac software. Compatible with all modern SCSI interfaces - including PPC, Blizzard & Classic Squirrel (but not Surf-Squirrel)
- PCW 'Best Scanner of 1998' Award - July 1998; PCW 'Best Scanner' September 1998
- Highly-acclaimed ArtEffect-SE v1.5 (normally £49.95) free with this bundle whilst stocks last

Amiga UMAX Scanner & Photoscope Bundle - now with free ArtEffect-SE v1.5 - still just £179.95!



The Eyetech EZTower System - from just £79.95

Thinking of towering up your A1200? Then you should certainly be considering the unique Eyetech EZTower System:

- ✔ The easiest way to re-house your A1200 by far
- ✔ Expand your system with EZPC or Zorro slots
- ✔ 250 W PSU with PC and Amiga power connectors
- ✔ Available in 4 models to suit different skills and budgets
- ✔ The only tower allowing both PC & A1200 in one case

"The Eyetech Tower offers clever solutions with a Velcro easyfit mentality" - CU Amiga

"This is definitely one of the easiest solutions to building your own Tower" - Amiga Format

	Backplate Kit	DIY* EZTower	Full EZTower	EZTower-Plus
DFO: face plate, cable	Yes	Yes	Yes	Yes
Custom backpanel w/SCSI, audio KOs	Yes	Yes	Yes	Yes
A1200 power & LED adapters	Yes	Yes	Yes	Yes
CE-approved metal PC case	n/a	Yes	Yes	Yes
No of bays/PSU capacity	n/a	10/250W	10/250W	10/250W
Accessible PCMCIA slot	Yes	Yes	Yes	Yes
DIY assembly instructions	Yes	Yes	n/a	n/a
Installation instructions	Yes	Yes	Yes	Yes
PC board/Siamese compatibility	Yes	Yes	Yes	Yes
Assembled & A1200-ready	No	No	Yes	Yes
EZ-Key adapter & Win95 k/b	Option	Option	Option	Yes
Eyetech installation option	No	No	Yes	Yes
Cost with options as specified	£39.95	£79.95	£99.95	£148.95

*With the DIY EZ-Tower you have to remove the PC tower backg plane and some internal shelving and fix the new backpanel in place



The A1200 EZTower

EZKey & EZKey-SE

- ✔ Autodetects and remaps Amiga & PC k/boards (both models)
- ✔ Choice of two keyboard-selectable PC key mappings (not-SE)

"The nicest keyboard adapter we've come across" - CU Amiga

EZKey/EZKey-SE alone - just	£39.95/£28.95
EZKey/EZKey-SE and Win95 k/b	£49.95/£38.95
EZKey/EZKey-SE and A4000 k/b	£69.95/£58.95

Join the Digital Imaging Revolution with Eyetech

Amiga Digital Imaging Software from Andreas Gunther

"An excellent piece of software" Gold Award - Amiga Format

ScanQuix4 & PhotoScope Software - *just £59.95*

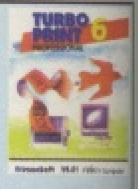
- ✔ 24 bit scanning with full range of editing options
- ✔ 'Scan-to-disk' option in Jpeg or IFF
- ✔ Stand-alone use or integrates with your Art package (AdPro, ArtEffect, PPaint, Photogenics, ImageFX, XLPaint, Pagestream 3, DPaint5) via AREXX
- ✔ SQ3 - for Epson, HP SCSI & Epson parallel scanners, Photoscope for UMAX 10S/1210S

CamControl Amiga Digital Camera Software - *now just £29.95*

- ✔ Serial connection versions available for most popular models of Kodak, Minolta, Olympus, Casio & Fuji digital cameras
- ✔ Picture transfer, camera control & sideshow options (camera dependant)
- ✔ Stand-alone use or integrates with your Art package (AdPro, ArtEffect, PPaint, Photogenics, ImageFX, XL Paint, Pagestream 3, DPaint 5) via AREXX
- ✔ Selectable serial device for use with high-speed interfaces like the PortJnr

TurboPrint 6 - the essential partner for your digital imaging work - £38.95

- ✔ The most comprehensive, fastest replacement printing system for all WB2x+ Amigas
- ✔ Supports the latest Epson, Canon, HP printers - including the award-winning Epson Stylus Photo
- ✔ Integrates seamlessly with ScanQuix/Photoscope scanning software and CamControl digicam s/w
- ✔ Poster printing, image tiling, colour correction, print spooling, photo optimisation etc, all as standard
- ✔ Selectable parallel device for use with high-speed interfaces such as the PortPlus (see below)



PortPlus - 2 x 460bd serial + 1 x 800KB/s parallel & PortJnr - 1 x 460bd serial ports (for attachment to the A1200's unused 'clock' port)

PortPlus - £79.95 - or just £70 if bought with Turboprint 6 software
PortJnr - £39.95 - or just £30 if bought with CamControl software



AMIGA 1200 Magic Packs

- Direct to Eyetech from Amiga International Inc.

- ✔ Full UK specification with Kickstart 3.1/Workbench 3.1 disks and manuals. UK PSU, mousemat, TV lead and 2mb graphics memory (in addition to any memory expansion included in the packs below).
- ✔ Fantastic software bundle including Wordworth 4SE, Turbocalc 3.5, Datastore 1.1, Photogenics 1.2SE, Personal Paint 6.4, Organiser 1.1, Pinball Mania and Whizz.
- ✔ Hard drive versions come with Scala MM300 pre-installed.
- ✔ Other options available, eg EZ-Tower Magic Pack bundles from **£348.95** - ring for details.
- ✔ Time-of-purchase upgrade packages available at very special prices - see asterisked* items in the 'Pack' boxes below.



Eyetech Starter Pack & Starter Pack-Plus

Diskette based system as above	Just £184.95
170MB HD-based system as above	Just £228.95

Add an '030/33EC accelerator with 8MB for just £59.95*

Eyetech Productivity Pack 3

170MB HD,030/33MHz/MMU/FPU/8MB — **Just £328.95**

Upgrade to an '040/25MHz/MMU/FPU w/16MB AND a 100W PSU for just £99.95*
... and/or upgrade to an EZTower-Plus with EZKey and PC k/d for just £120.00*

Eyetech MiniTower Pack 3

2.5GB HD, '040/25MHz/MMU/FPU/16MB, 20-speed CDROM, EZ-CD-Mk4 4-device buffered i/f & cables, EZIDE s/w, MiniTower case with 230W PSU — **Just £598.95**

Upgrade to an '040/40MHz/MMU/FPU with 32MB for just £69.95*

Eyetech Professional Pack 3

4.3GB HD, '040/33MHz/MMU/FPU/32MB, 24-speed CDROM, EZCD-Mk4 4-device buffered i/f & cables, EZIDE s/w, EZTower-Plus case with 250W PSU — **Just £798.95**

Upgrade to a 160MHz PPC with '040/25MHz/MMU/FPU w/64MB for Just £129.95*

New! Amiga SVGA Monitors

- for use with Amiga Zorro & the new PPC gfx cards, scandoublers & the EZPC-Tower system

- ✔ All monitors come with a 3-year warranty and at least 1 year on-site maintenance - call for details.
- ✔ Special pricing on scandoublers/flickerfixers bought with monitors from just **£45 extra**
- ✔ Monitor specifications are quoted as the highest vertical refresh rate at the maximum resolution. Higher refresh rates (>=72Hz) at lower resolutions are available and give a more visually relaxing display.
- ✔ Scandoubler/flickerfixers have resolutions governed by the Amigas AA/AGA chipset and are restricted to a maximum vertical refresh of 73Hz and a maximum usable resolution of 724Hx566V. The PPC BVision supports 1600x1280@72Hz.



14" SVGA 0.28DP, 1024Hx768V @ 60Hz	£98.95
15" SVGA 0.28DP, 1024Hx768V @ 60Hz	£128.95
17" SVGA 0.28DP, 1280Hx1024V @ 60Hz	£248.95
17" SVGA 0.26DP, 1600Hx1280V @ 75Hz	£399.95

Apollo Accelerators

- from just £44.95

Turbo 1230LC '030EC/25MHz (5 MIPS) - max 8MB - *just £44.95*

Options: 25/33 MHz FPU + £10.00
MMU (non-EC) version + £10.00
33MHz version (7 MIPS) + £5.00



A600 '030/33MHz/MMU/FPU(7 MIPS) to 32MB	£69.95
A600 '030/33MHz/MMU/FPU(7 MIPS) w/32MB	£99.95
A1200 '040/25MHz/MMU/FPU* (19 MIPS)	£127.95
A1200 '040/33MHz/MMU/FPU* (25 MIPS)	£157.95
A1200 '040/40MHz/MMU/FPU* (30 MIPS)	£187.95
A1200 '060/50MHz/MMU/FPU* (39 MIPS)	£287.95
A1200 '060/66MHz/MMU/FPU* (51 MIPS)	£317.95

*To 32MB. Optional 2nd simm socket (tower only) offers 64MB total

4MB - £9.95 8MB - £14.95 16MB - £24.9532MB - £29.95

Tip: Buy your memory with the accelerator to ensure full compatibility

The Eyetech EZPC-Tower

The most economical way to seriously expand your Amiga. All this for just £999.95 - and you get a free PC thrown in!

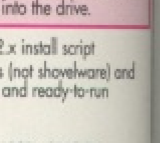
- ✔ EZ-Tower Plus with keyboard, EZKey adapter & 250W PSU
- ✔ 30-bit A4 single pass flatbed scanner. Full colour still & video capture card.
- ✔ 16-bit, 32 voice wavetable sound card with midi interface & recording s/w
- ✔ 2 additional high speed serial and one additional bidirectional parallel ports
- ✔ Amiga accessible high density floppy drive, 32-speed CDROM & 3.2GB HD
- ✔ High resolution 24-bit Amiga graphics display via the Siamese RTG2.5 ethernet system. Full screen, full motion MPEG playback (with sound).
- ✔ Full PC with 64MB memory etc etc for your less serious computing activities.

The *Top-Rated* Eyetech CD-Plus Range for the A1200

"Eyetech have come up with a real winner with the new CDROM drive" - Ben Vost, Amiga Format

20-speed CDPlus-SE now just £85.95
24-speed just £88.95; 32-speed just £98.95!

- ✔ Whisper quiet 24-or 32- speed CDROM mechanism
- ✔ **EZCD-SE** 4-device buffered interface, 3-connector 40-way and 2-connector 44-way cables included.
- ✔ CDPlus driver software specially written for Eyetech by the author of IDE-fix
- ✔ Optional Amiga and CDDA audio mixer with Gold phono audio jacks.
- ✔ 20-watt CE-approved PSU complete with 13A plug.
- ✔ Optional upgrade to MiniTower or Desktop case with 230W PSU (which can also hold extra drives and power your Amiga) ***just £20 extra!***





A1200 HARD DRIVES - LS120, ZIPs

Thinking of buying a BIG drive? Don't waste your money on ***ANY DRIVE OVER* 4.3GB** as the Amiga O/S doesn't support it! (2^32-1 bytes actually). They appear to work but overwrite the RDB after 4.3GB into the drive.

- ✔ All drives come ready to use with WB3.0 preinstalled & WB2.x install script
- ✔ All drives over 200 MB come with over 45 top quality utilities (not shovelware) and MMe multimedia authoring*software preinstalled, configured and ready-to-run

TowerDrives (3.5" drives, 25mm high):

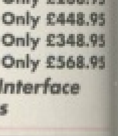
1.7GB - **£89.95** 2.1GB - **£99.95** 3.2GB - **£119.95** 4.3GB - **£149.95**

LS120 & Zip Drives (ATAPI i/f - EZIDE needed):

LS120 (HD Floppy/120MB Cart)	- £79.95	3 x 120MB carts	- £34.95
Zip Drive (Mac emul'n compat)	- £79.95	3 x 100 MB carts	- £34.95

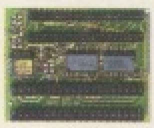
2.5" Instant Drives for the A600/A1200 SX32

20MB	An entry-level drive for the SX32/A600	£29.95
170MB	An entry-level drive for the SX32Pro/A1200	£69.95
720MB	A drive for serious A1200/SX32 Pro users	£99.95
1.4GB	A high performance drive for power users	£139.95
1.8GB	Top-class drive for the A1200/SX32Pro	£169.95



The new EZCD-SE economy 4-device buffered interface from Eyetech - Just £24.95

- ✔ Suitable for most medium performance A1200 systems
- ✔ Comes with Eyetech ATAPI s/w by the author of IDE/Fix
- ✔ Trade up to EZCD-Mk4 i/f at full buying price (less carriage) within 30 days (if required).



EZCD-SE and CDROM software	- just £24.95
EZCD-SE, CDROM s/w with 3x40 way & 13 cm 44-way cables	£34.95
EZCD-SE with full EZ-IDE s/w and 40-&44-way cables	£44.95

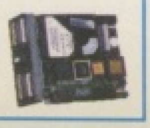
The new EZCD-Mk4 High Performance 4-device buffered interface with AIPU from Eyetech - Just £39.95

- ✔ High performance active interrupt control circuitry essential for highly expanded and/or accelerated A1200s.
- ✔ Comes with Eyetech ATAPI/CDROM software by the author of IDEfix

EZCD-Mk4 and CDROM software	- just £38.95
EZCD-Mk4, CDROM s/w w/ 3x40-way & 13cm 44-way cables	£48.95
EZCD-Mk4 with full EZ-IDE s/w and 40- & 44-way cables	£58.95

Expand your CD32 - send for details!

SX32 Mk2	£149.95
SX32 Pro50	£269.95
SX32 Pro40EC	£199.95



EZWriter Internal System 2/8x + MakeCD s/w (Twr/A4K)	£249.95
EZWriter-SE System 2/8x + MakeCD s/w (external)	£269.95
EZReWriter-SE System 2x2x6 + MakeCD s/w (external)	£299.95
With EZCD-SE i/f, 44-way & 40-way cables & CDROM s/w	add £20
With EZCD-SE i/f, 44-way & 40-way cables & EZ-IDE s/w	add £30

EZ-IDE

Amiga IDE, ATAPI, CDROM and removable media enhancement s/w

Only available from Eyetech. Probably the only hard drive/ CDROM/LS120/ZIP/SyQuest software you'll ever need.

- ✔ Supports LS120, Zip, Jaz, SyQuest and other IDE/ATAPI removable cartridge drives AUTOMATICALLY. Includes Eyetech's IDE ZipPrepTools.
- ✔ Optimises IDE hard drive performance automatically. Eliminates 'Max-Transfer' nightmares.
- ✔ Extensive CDROM support including multidisk changers, direct digital audio transfer, CD32 emulation, high performance filesystem support for Amiga, Mac and PC CDs.
- ✔ Ready-to-use as shipped. No sending away to foreign parts for registration codes as with the 'commercial' versions of IDE-fix97 and Atapi P'n'P.

EZ-IDE Software	*- £34.95*
If bought with any EZCD i/f Zip or LS120 drive	*- £16.95*
*Upgrade from Eyetech CDPlus/IDEfix s/w**	*- £19.95*

* Trade-in & proof of purchase required

phase5 PowerUp PPC + '040/'060 Accelerators

Without SCSI (not upgradable)

A1200 160 MHz 603e PPC with '040/25/MMU.FPU	Only £238.95
A1200 160 MHz 603e PPC with '060/50/MMU/FPU	Only £448.95
A1200 240 MHz 603e PPC with '040/25/MMU/FPU	Only £348.95
A1200 240 MHz 603e PPC with '060/50/MMU/FPU	Only £568.95

With factory fitted on-board Fast SCSI II Interface - add just £50 to the above prices

Blizzard Vision Permedia 2 PPC graphics card now available! Unbelievable quality and speed - 1600x1280@72HZ! No Zorro slots needed! 4mb card - £168.95 or just £148.95 with a PPC

Eyetech Amiga Parts & Price Index October 1998 - 44 (0)1642-713-185 - 07000 4 AMIGA

Interfaces and Adapters: EZ-Key & DIY Tower Components

ADPT-EZKY	Amiga/PC k/b -> A1200 kbd ribbon cable	36.95
ADPT-EZKY-A4K	A1200 EZKey/6p->5p adptr/A4000 kbd bundle	69.95
ADPT-EZKY-W95	Amiga/PC k/b->A1200 rib cab+Win95 kbd	49.95
ADPT-EZK2	Mk 2 Amiga/PC k/b -> A1200 kbd direct connect	28.95
ADPT-EZK2-A4K	A1200 EZKey MK2/6p -> 5p adptr/A4000 kbd bdle	58.95
ADPT-EZK2-W95	Mk2 Amiga/PC k/b->A1200 rib cab+Win95 kbd	38.95
ADPT-HD-2/3	2.5"/44way -> 3.5"/40w+4w & mtg bracket	11.95
ADPT-HD-3/5	3.5" Zip/SyQuest/FDD/HD brkt/pl ->5" bay	5.95
ADPT-KBD-5P6P	Amiga/PC k/b adapter 5p din-F ->6p m/d-M	5.95
ADPT-KBD-6P5P	Amiga/PC kbd adapter 6p mindin-F ->5pd-M	5.95
CAB-KBD-MF	5p DIN M - 5p DIN F k/b ex cable 1.2m	7.95
ADPT-DF0-FP	Tower faceplate adapter for A1200 int FD	6.95
ADPT-DF0-TWR	34-34 way cable and faceplate for DF0	12.95

Interfaces and Adapters: A1200 Ethernet, SCSI

ADPT-ETH-BNCT	BNC T-piece 2xM + 1xF	4.95
ADPT-ETH-TERM	Ethernet BNC coax terminator 50R	4.95
ADPT-PCM-ETH-C	PCMCIA ethernet card with Amiga/PC drivers	79.95
ADPT-PCM-ETH-H	Hydra PCMCIA ethernet card with Amiga drvrs	129.95
CAB-ETH-60C	Ethernet coax/BNC-F 60cm for Siamese	9.95
CAB-UPT-X60C	Crossed twisted pair/RJ45 for Sisys 60cm	6.95
ADPT-SCS-CSQR	Classic Squirrel PCMCIA SCSI i/f 50pCM	59.95

I/F & Adapters: Flickerfixers, Genlocks, VGA Adapters, Monitor Leads

ADPT-GLK-COMP	EZ-Gen composite video Genlock for A1200	99.95
ADPT-VGA-BV4M	BVision 4MB gfx card for A1200 (needs PPC)	169.95
ADPT-VGA-BMON	Auto Amiga/BVision m/sync monitor switch	39.95
ADPT-VGA-M2SD	EZ-VGA-Mk2 external s/doubler PLL u/gradable	69.95
ADPT-VGA-PLFF	EZ-VGA-Plus external flickerfixer 23F-15F PLL	99.95
ADPT-VGA-SDUG	SDBL2 to SD-flickerfixer u/g	50.00
ADPT-VGA-INSD	EZ-VGA internal A1200 s/doubler non-upgrad'le	54.95
ADPT-VGA-INFF	EZ-VGA- internal A1200 flickerfixer	89.95
ADPT-VGA-SESD	EZ-VGA-SE s/doubler 23F-15M Xtal not u/g	54.95
ADPT-VGA-SEFF	EZ-VGA-SE flickerfixer 23F-15M Xtal	89.95
ADPT-VGA-15M23M	VGA 15pHD-M -> 23pD-M Amiga RGB adapter	14.95
ADPT-VGA-15M9F	Adapter from 15p HD-M VGA to 9pD-F	9.95
ADPT-VGA-9M15F	Monitor adapter 9p D-F to 15p HD-M	9.95
ADPT-VGA-UNBF	Amiga 23 pin(f)-15 pin HD(f) VGA adapter	12.95
ADPT-VGA-BUF	Amiga 23pin-F to 15pinHD-F buffered adapter	16.95

I/F & Adapters - IDE/ATAPI, Serial, Parallel & Floppy Drive

INT-IDE-FLYR	Elbox 4-dev high performance buf'd A1200 IDE i/f	68.95
INT-12I-EZCD4	Mk4 4-dev buf IDE i/f w/AIPU w/A1200 CD s/w	38.95
INT-12I-EZCD4/C	Mk4 4-dev buf IDE i/f w/3x40,2x44 13cm cabs	48.95
INT-12I-EZCD4/CE	Mk4 4-dev buf IDE i/f w/3x40, 2x44cabs, EZIDE	58.95
INT-12I-EZCDSE	Economy 4-dev buf IDE i/f w/A1200 CD s/w	24.95
INT-12I-EZCDSE/C	Econ 4-dev buf IDE i/f w/3x40,2x44 13cm cabs	34.95
INT-12I-EZCDSE/CE	Econ 4-dev buf IDE i/f w/3x40, 2x44cabs, EZIDE	44.95
INT-4KI-CD4	4-device EIDE i/f for A4000 w/CDROM s/w	19.95
INT-FDD-DF0	Interface for std Sony FDD for DF0 880KB	9.95
INT-SER-PTJR	PortJunior - 460KB serial i/f for A1200	39.95

Zorro 2/3 Boards and Adapters

GFX-Z2-CV643D	C64/3D graphics card w/out f/fixer (limited stock)	149.95
ADPT-VGA-AMON	Auto Amiga/CV643D m/sync monitor switch	39.95

Cables & Cable Adapters: Audio & Mains

CAB-AUD-CD	CDROM inv'd T audio cab .6m + 2xRCA plg	9.95
CAB-AUD-MIX	RCA(phono)-M -> RCA-M+RCA-F mix lead 1.8m	6.95
CAB-AUD-2M2M	RCA(phono)-2xM -> RCA2xM stereo lead 1.8m	4.95
CAB-AUD-MJ/PH	3.5mm st minijack->2xphono-M plugs 1.2m	5.95
ADPT-AUD-RCA	RCA(phono)-M -> 2xRCA-F adapter	2.50
ADPT-AUD-RCA-G	RCA(phono)-M ->2xRCA-F gold plated adapt	3.50
CAB-IEC-1.5M	AC power cable 13A plug -> IEC skt 1.5m	2.95
CAB-IEC-4X13	AC powerstrip 1xIEC-M -> 4x13A-F mains skt	19.95
PLUG-IEC	Rewirable IEC monitor plg for PSUs/MT/DT	4.95

Cables & Cable Adapters: Serial, Modem, SCSI, Printer

CAB-SER-EX2M	DB25-M -> DB25-F RS232 extn cab 2m	7.95
CAB-SER-EX50C	DB25-M -> DB25-F RS232 extn cab 0.5m	6.95
CAB-SER-NUL2M	Null modem cable w/ D9F & D25F at each end	9.95
ADPT-SER-25F9M	25p-F to 9pM serial RS232 adapter	4.95
ADPT-SER-25M9F	25p-M to 9pF serial RS232 adapter	4.95
ADPT-SCS-50C2F1M	50pin Centronics 'T' 2x F to 1 x M SCSI adapter	14.95
ADPT-SCS-50/50CF	Centronics 50p-F to Centronics 50p-F (for Squirrel)	14.95
CAB-BT-EX10	10m BT extn cable + 2 way phone adapter	9.95
CAB-BT-MOD	FCC684/6 to BT4 modem phone lead 1m	5.95
CAB-SCS-25D/50C	SCSI cable DB25-M -> Cent50-M 1m	9.95
CAB-SCS-25D/25D	SCSI cable DB25M-DB25M mac type	9.95
CAB-SCS-50C/50C	SCSI cable Centr50M->Centr50M 1m	9.95
CAB-SCS-50H/50C	SCSI-2 cable 50h/pDM->Centr50M 1m for PPC	19.95
CAB-SCS-50H/25D	SCSI-2 cable 50h/pDM->25D-M 1m for PPC	19.95
CAB-PAR-FULL	Bidirectional printer cable all pins connected	9.95

Cables & Cable Adapters: VGA, Keyboard, Switchboxes & Cables, Scart Cables

ADPT-SW-S/K	Dual monitor & k/b switchbox	19.95
ADPT-SW-S/K/M	Dual monitor, k/b & mouse switchbox	24.95
CAB-KBD-MM	5p DIN M - 5p DIN M k/b cable 1.2m	7.95
CAB-VGA-MF	15p DM-HD - 15p DF-HD VGA ext cable 2m	9.95
CAB-VGA-MM	15p DM-HD - 15p DM-HD VGA cable 2m	9.95
ADPT-SCAR-CMP	Amiga comp video (RCA)+2xAudio to SCART	12.95
ADPT-SCAR-RGB	Amiga 23p+2xRCA to RGB TV SCART + audio	12.95

Cables: HD, CDROM, Floppy, Clock Port Data & A1200 HD Power

CAB-PD-40F44F	2.5" (44F) to 3.5" (40F) data cab adapt for A1200	9.95
CAB-PD-2F	Power splitter floppy drive to hard drive + floppy	9.95
CAB-PD-30C	44->40way 3.5" HD data & pwr cabs -A1200	14.95
CAB-HD-KIT	A1200 full 3.5" hard drive fitting kit	24.95
CAB22-2W-9C	22way-Fx2 A1200 clock port cable 9cm o/a	5.00
CAB34-2W-50C	34way-F x2 FDD ribbon cable for tower	9.95
CAB40-2W-20C	40 way IDE cable 2 connector 20cm	5.00
CAB40-3W-1M	40Way IDE/HD/CD cable 3 connector 1m o/a len	9.95
CAB40-3W-60C	40w-F x3 HD/CD/IDE cable 20+40=60cm o/a	9.95
CAB40-CUST	Custom cable 3x40way IDE up to 1.5m	19.95
CAB44-2W-13C	44way (2.5" HD) cable 2 cntr, 13cm o/a	9.95
CAB44-2W-60C	44way (2.5" HD) cable 2cntr, 60cm o/a	19.95
CAB44-3W-12C	44way (2.5" HD) cable 3 cntr, 12cm o/a	12.95
CAB44-3W-24C	44way (2.5" HD) 7+17cm,3 cntr,24cm o/a	14.95
CAB50-CUST	Custom cable 3x50way IDC SCSI + 1xCent50-F 60cm	19.95

Cables: HD, CDROM, Floppy Power Splitters - Tower Systems

CABPW-1W-1F	Power converter cab HD-M -> FD-F	4.95
CABPW-2W-1H1F	HD/FD pwr splitter HD-M->1xHD-F/1xFD-F	6.95
CABPW-2W-2F	FDD power splitter 4pM->2xFD-F	6.95
CABPW-2W-2H	HD/CD pwr splitter 4p-M ->2x 4p-F 15cm	6.95
CABPW-3W-2H1F	HD/FD pwr splitter HD-M->2xHD-F/1xFD-F	8.95
CABPW-3W-3H	HD power splitter HD-M -> 3xHD-F	8.95
CAB-HD-PWXTN	4p-M -> 4p-F HD/CD power cab ext 0.9m	9.95
CAB-HD-FD/4	23p-M-floppy -> 4p-F HD/CD pwr 0.9m	9.95

CDROM Systems including EZ-Tower & MT/DT Bundles

CD-SE-20X	CDPlus-SE system 20 speed with CDROM s/w	85.95
CD-SE-24X	CDPlus-SE system 24 speed with CDROM s/w	88.95
CD-SE-32X	CDPlus-SE system 32 speed with CDROM s/w	98.95
CD-DT-20X	CDPlus Desktop 20 speed with CDROM s/w	105.95
CD-DT-24X	CDPlus Desktop 24 speed with CDROM s/w	108.95
CD-DT-32X	CDPlus Desktop 32 speed with CDROM s/w	118.95
CD-FT-20X	CDPlus EZ-Tower 20 speed with CDROM s/w	179.95
CD-FT-24X	CDPlus EZ-Tower 24 speed with CDROM s/w	184.95
CD-FT-32X	CDPlus EZ-Tower 32 speed with CDROM s/w	195.95
CD-MT-20X	CDPlus MiniTower 20 speed with CDROM s/w	105.95
CD-MT-24X	CDPlus MiniTower 24 speed with CDROM s/w	108.95
CD-MT-32X	CDPlus MiniTower 32 speed with CDROM s/w	118.95
ADPT-AUD-CDSE	CDPlus-SE A1200/CD audio mixr/adapter	19.95
CAB44-CD-13C	44way (2.5" HD) cable purch with CD/HD 13cm	6.00
CAB40-DDC	A1200 IDE skt adptr 40F-40M with mtgs 15cm	9.95

CDWriter & ReWriter Systems including EZ-Tower & MT/DT Bundles

CDR-IN-2x8	EZWriter 2/8x w/MakeCD for A4k,Twr	249.95
CDR-PL-2x8	EZWriter-Gold external 2/8x w/MakeCD	299.95
CDR-SE-2x8	EZWriter-SE external 2/8x w/MakeCD	269.95
CDR-DT-2x8	EZWriter Desktop 2/8 speed w/MakeCD	299.95
CDR-MT-2x8	EZWriter MiniTower 2/8 speed w/MakeCD	299.95
CDR-FT-2x8	EZWriter Full EZ-Tower 2/8 speed w/MakeCD	379.90
CDRW-IN-226	EZReWriter 2x2x6 w/MakeCD for A4k,Twr	279.95
CDRW-PL-226	EZReWriter-Gold external 2x2x6 w/MakeCD	239.95
CDRW-SE-226	EZReWriter-SE external 2x2x6 w/MakeCD	299.95
CDR-CDSE-UG	EZCD-SE+40+44way cabs + CDROMs/w w/CDR	20.00
CDR-CDM4-UG	EZCDMk4+40+44way cabs + EZIDE s/w w/CDR	30.00
CDR-DSK-10	Recordable CD media (WORM) 650MB x10	19.95
CDR-DSK-10-SP	Recordable CD media 650MBx10 pur w/EZWriter	9.95
CDRW-DSK	Single CDrewritable disk 650MB	19.95
CDRW-DSK-SP	Single CDrewritable disk 650MB pur w/EZReWriter	9.95
DVR-MCD-TAO-P	MakeCD TAO (P) Amiga CD rec s/w w/ATAPI	38.95

EZ-Tower Systems, MiniTower/Desktop Cases & Accessories

CASE-FT-SLE	DIY EZTower, 250W PSU, EZKey, PC kbd lim. stock	99.95
CASE-FT-1200	Full A1200 Tower 250WPSU,LED adpt,FD cab	99.95
CASE-FT-EXKT	EZ-Tower conversion kit - No PC Tower	39.95
CASE-FT-KIT	EZ-Tower kit w/ bkpnl for self conversion	79.95
CASE-FT-PLUS	Full A1200 EZTWR, EZKEY i/f, PC kbd	138.95
CASE-DT	Desktop case with 200W+ psu for HD/CDROM	29.95
CASE-MT	MiniTower case wth 200W+ psu for CD/HD	29.95
ADPT-AUD-EZTW	EZTwr audio mixer/adapter for A1200/CDROM	19.95
ADPT-SCSI-EZTW	EZTwr SCSI adpt 30cm 2xCent50F, 1xIDC50F	19.95
CAB-SER-SSQ	9pDM->9pDF SurfSq EZTwr ser extn cab 50cm	9.95

SVGA Monitors - require Scandoubler and/or Flickerfix to use all Amiga modes

MON-14-.28	14" dig SVGA 0.28DP 1024x768@60Hz - 3yrO.S.	98.95
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DVR-CAM-CAS	CamControl s/w for Casio QV10/100/300	29.95
DVR-CAM-FUJ	CamControl s/w for Fuji DS5/DS7	29.95
DVR-CAM-KOD	CamControl s/w for Kodak DC20/DC25	29.95
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DVR-CAM-OLY	CamControl s/w for Olympus 420L/820L/1000L	29.95
INT-12I-PTJR-SP	PortJnr hi-speed ser i/f pur with CamControl s/w	30.00

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DVR-EZIDE	EIDE/ATAPI HD/CDROM/ZIP/LS120/SyQst drvr	34.95
DVR-EZIDE-CU	P/x upgrade to EZIDE from compet product	19.95
DVR-EZIDE-SP	EIDE/ATAPI enhancer/CDROM s/w bundle pri	16.95
DVR-MKCDP	MakeCD(P,TAO) Amiga CD writing s/w	38.95
DVR-SQ4	ScanQuix4 w/ 1 Amiga driver (Eps or HP SCSI)	59.95
DVR-PHS	PhotoScope UMAX-SCSI Amiga scanner driver	59.95
DVR-ENPR	EnPrint. Amiga printer dvr for pre 03/97 Epsons	9.95
DVR-TBPR6	TurboPrint 6.x Amiga printer driver English	38.95
ADPT-SQ3-PAR	SQ3 adapter Epson scanner->par prt cable	9.95
CAB-PAR-FULL	Bidirectional printer cable all pins connected	9.95
SCN-FBA4-BDL3	UMAX award-w'ing SCSI A4FB scanner w/ s/w	179.95

Free ArtEffect-SE v1.5 with above whilst stocks last

ADPT-SCS-CSQR-SP	Classic Squirrel PCMCIA SCSI i/f 50pCM pur w/scnr	49.95

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CD24-BARE	Bare 20 speed CDROM mechanism for twr/A4k	39.95
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FDD-ITL-1200	Replacement A1200/600 int FDD 880KB	24.95
FDD-ITL-BARE	Bare 1.44/880 FDD for tower (needs i/f)	19.95
FDD-ITL-D/C/I	Twr int 880Kb FDD(Sony/EZDF0/cab bundle)	29.95
FDD-ITL-D/I	Twr intl 880Kb FDD (Sony/EZDF0) No cable	24.95
HD2-21	21MB 2.5" hard drive 90 days warranty	29.95
HD2-170	170MB 2.5" hard drive	69.95
HD2-720	720MB 2.5" hard drive	99.95
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HD3-ZIP-CT3	3-Pack of 100MB (nominal) Zip cartridges	34.95
HD3-ZIP-IDE	Bare ATAPI/IDE Zip drive internal	79.95
CAB44-CD-13C	44way (2.5" HD) cable sold with CD/HD 13cm	6.00
CASE-ZIP	Metal slim case-FDD/IDEZip/SyQuest/LS120	9.95
CASE-HD-ECON	External 3.5" HD case no psu	19.95
CASE-HD-REM	Removable drive case for 3.5" HD (metal)	24.95

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FAN-60MM	Cooling fan for A1200 60x60x25mm 5/12v	14.95
KBD-A1000	A1000 keyboard with 6-pin mini-Din cntr*	39.95
KBD-A1200	Replacement A1200 k/b w/ribbon cable*	24.95
KBD-A4000	A4000 keyboard with 6-pin mini-DIN plug*	34.95
KBD-WIN95	Windows 95 keyboard with 5-pin AT DIN plug*	19.95
MOD-EXT-14	Modem AT 14.4dat/14.4 fax+EU psu/tel cab	19.95
MOU-WHI	Amiga mouse - white/cream -with mousemat*	6.95
TKB-AM	Amiga trackball 3-button replaces std mouse*	14.95
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SPK-16W	16W PMPO speakers w/ PSU 3.5mm jack	10.95
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Accelerators: PowerPC with 680x0 Co-processor

ADPT-VGA-BV4M-SP	BVision 4MB A1200 gfx card pur w/ PPC acc	149.95
ADPT-VGA-BMON	Auto Amiga/BVision m/sync monitor switch	39.95
ACC-PPC-16-4025	Bliz'd PPC603/160MHz+040/25/FPU/ no SCSI	238.95
ACC-PPC-16-6050	Bliz'd PPC603/160MHz+060/50/FPU no SCSI	448.95
ACC-PPC-24-4025	Bliz'd PPC603/240MHz+040/25/FPU no SCSI	348.95
ACC-PPC-24-6050	Bliz'd PPC603/240MHz+060/50/FPU no SCSI	568.95
ACC-PPC-16S-4025	Bliz'd PPC603/160MHz+040/25/FPU/SCSI-2	288.95
ACC-PPC-16S-6050	Bliz'd PPC603/160MHz+060/50/FPU/SCSI-2	498.95
ACC-PPC-24S-4025	Bliz'd PPC603/240MHz+040/25/FPU/SCSI-2	398.95
ACC-PPC-24S-6050	Bliz'rd PPC603/240MHz+060/50/FPU/SCSI-2	618.95

Accelerators: Apollo 680xx

ACC-060-66	Apollo '060 MMU/FPU 66MHz A1200 acc (lim avail)	317.95
ACC-060-50	Apollo '060 MMU/FPU 50MHz A1200 acc (lim avail)	287.95
ACC-040-40	Apollo '040 MMU/FPU 40MHz A1200 accel	187.95
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ACC-630-33	Apollo '030 MMU/FPU 33MHz A600 acc to 32M	69.95
ACC-630-33+32	A600 accel 030/33MHz/MMU/FPU/32MB (max)	99.95

Memory: Simms, Zip RAM & FPU's

MEM-32MB-72P	72 pin 32 MB 32 bit simm for Amiga	29.95
MEM-16MB-72P	72 pin 16MB 32 bit simm for Amiga	24.95
MEM-4MB-72P	72 pin 4MB 32 bit simm 70 ns	9.95
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FPU-PGA-40	MC68882 PGA FPU 40MHz OK for 50MHZ	29.95
ACC-4/60-SSKT	Apollo 1240/60 2nd simm socket & fitting	20.00

WB Disks, k/s ROMS, Manuals etc

SYS-WB30-DSK	Amiga WB3.0 disksx5 + Eyetech HD install	14.95
SYS-WB30-SET	Amiga WB3.0 disks x5 + Workbench manual	18.95
SYS-WB31-DSK	Amiga Workbench 3.1 disks x6 (/w HD inst)	14.95
SYS-KS31-ROM	A1200 Kickstart 3.1 ROM chips (2 chips)	29.95
SYS-KS31-SET	A1200 K/s 3.1 ROMs & WB3.1 dskx6 (no books)	36.95
SYS-KS31-MPUG	A1200 Mag Pk u/g 3.1ROMs,WB3.1,appln s/w, manls	49.95

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EZPC-SIA-CF3-UG	EZTower/EZKey/kbd u/g to EZPC-SIA-CF3	879.95
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SYS-SIA-R25	Siamese system software RTG v2.5	99.95
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SX32-MK2	SX32 Mk2 Ram/Clock/FPU expander for CD32	149.95
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AMP-MCD-PK3	Amiga M P 20xCD/1.7GB/'040-25/16MB/MT	598.95
AMP-PDV-PK3	A1200 Mgk pk 170MB/'030-33/8MB	328.95
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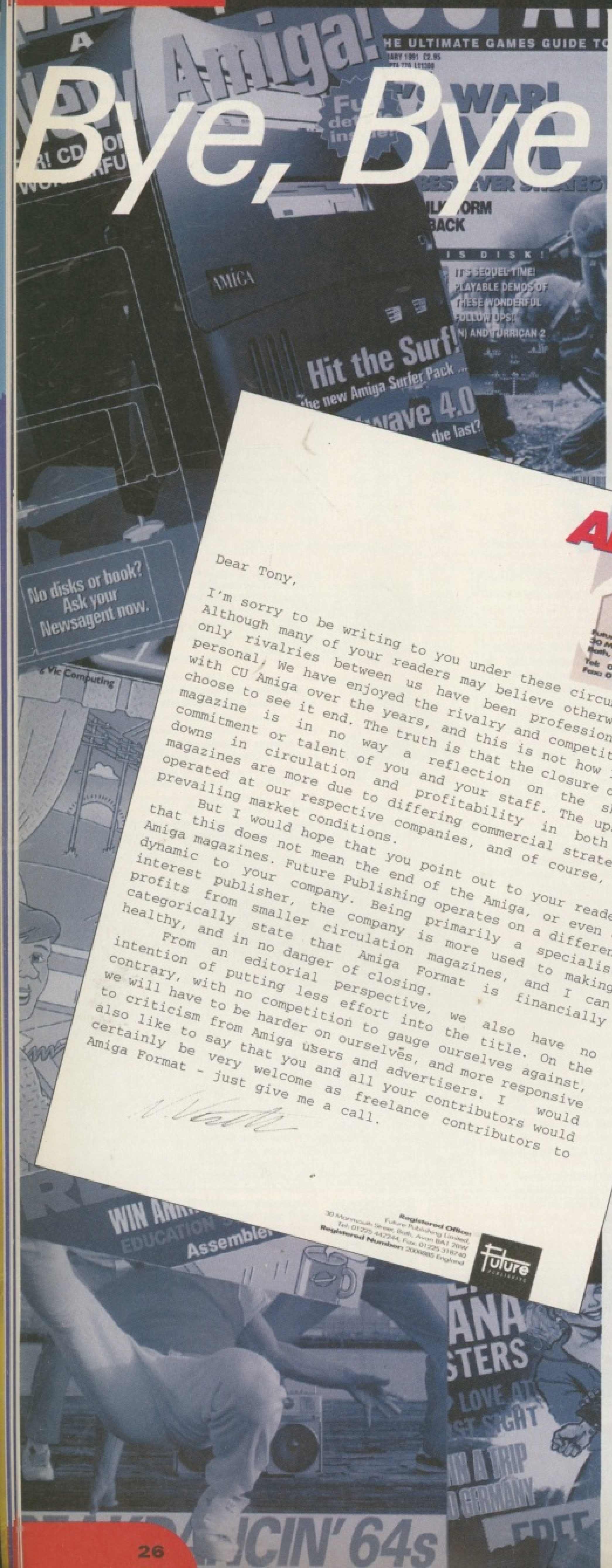
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Bye, Bye Baby...



AMIGA FORMAT

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Dear Tony,

I'm sorry to be writing to you under these circumstances. Although many of your readers may believe otherwise, the only rivalries between us have been professional, not personal. We have enjoyed the rivalry and competitiveness with CU Amiga over the years, and this is not how I would choose to see it end. The truth is that the closure of your magazine is in no way a reflection on the skills, commitment or talent of you and your staff. The ups and downs in circulation and profitability in both our magazines are more due to differing commercial strategies operated at our respective companies, and of course, the prevailing market conditions.

But I would hope that you point out to your readers that this does not mean the end of the Amiga, or even of Amiga magazines. Future Publishing operates on a different dynamic to your company. Being primarily a specialist interest publisher, the company is more used to making profits from smaller circulation magazines, and I can categorically state that Amiga Format is financially healthy, and in no danger of closing.

From an editorial perspective, we also have no intention of putting less effort into the title. On the contrary, with no competition to gauge ourselves against, we will have to be harder on ourselves, and more responsive to criticism from Amiga users and advertisers. I would also like to say that you and all your contributors would certainly be very welcome as freelance contributors to Amiga Format - just give me a call.

Registered Office:
Future Publishing Limited,
30 Monmouth Street, Bath, Avon BA1 2BW
Tel: 01225 442244, Fax: 01225 318740
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Future

We'd like to say this is all a joke, but alas it's not. This is the last ever issue of CU Amiga, so we thought we'd take a few pages to close the account properly.

Yes, this is the last ever issue of CU Amiga. Well technically it isn't definitely the last ever, as EMAP, CU Amiga's publisher, could reopen the title at any time, but there are no plans to do so. If EMAP decide to service the next generation Amiga user base it's unlikely that the CU Amiga name would be used (for a start the "CU" prefix would mean even less then than it does now). So, based on that, it's safe to say that this is the last CU Amiga ever.

While the current team consists of myself (Tony), Andrew Korn, Richard Drummond, Russ Cox and a long list of dedicated freelance contributors, CU Amiga has roots that stretch back so far that no-one actually knows when it all started. We can pinpoint its change from simply "CU" to "CU Amiga" but the magazine has evolved through a number of forms including Commodore User and Vic User before that! What a shame it is then that there's no suitable evolutionary step that can be taken at this point. Had we managed to stick it out for the next year or so, no doubt the magazine would have shed its skin once again and re-invented itself as the world's best Super Amiga mag.

Conspiracy theories

We've already had our fair share of conspiracy theories suggested by disappointed readers. There's one particularly ill-informed one that claims EMAP is ditching all its computer titles. That's total rubbish. Then there are the more predictable ones about us closing CU Amiga and starting up a PC magazine. Let me assure you, at this point none of the CU team has any intention of moving to a PC magazine (not that we should be ashamed of it if we were – everybody has to make a living). A few readers have suggested we all take a pay cut. Well we are, a 100% pay cut! However, most have been very kind in their response to the news and I'd like to say a big thankyou to all of them on behalf of the team. It means a lot to know that all our hard work was appreciated by so many.

There are a few small consolations to this situation. For example, we are now at liberty to let a few cats out of a few bags, such as the double lives lead by the CU team. As many suspected, Mat Bettinson is actually a cyborg: half man, half

Amiga. His recently shaven head was due to his having yet another CPU upgrade inserted into his cranium. Then there's Andrew Korn. By night he transforms himself into "The Great Kornholio", a stage hypnotist who regularly draws large audiences at West End theatres. Richard Drummond pleaded with us not to mention the fact that he was once in the line-up of Paul McCartney's Wings, but we couldn't resist letting you in on that one. Russ Cox, despite his 'hard man of techno' image, is actually considered something of a superstar DJ at his local under 16s roller disco. Then there's me. I'm not writing this. I developed a copy generating machine many years ago when I was bored of writing formula game reviews. It's been programmed to adapt to changes, request a few keywords and then pump out words to fit a specified space on the page. I did this because I was actually cryogenically frozen back when Commodore went bust. Hopefully my request to be defrosted when the Amiga makes a comeback will be granted. Otherwise, this copy generating system is programmed to spill lots more secrets about lots more people until they unfreeze me. And that's the truth.

Love hate

Let's not deny we all have a love-hate relationship with our Amigas. CU Amiga has always been honest about its feelings, but it seems appropriate that we now lay down our real loves and hates, so here they are:

Love
- **Easily renderable logo**
- **You guys (no really!)**
- **Cult status**
- **Its immortality**

Hate
- **Can't keep us in a job**
- **No-one knows what it is**
- **The response "Oh yeah, aren't they rubbish now?"**
- **Official Amiga theme tune**
- **AMOS**

While we're here, we may as well let you in on some of our 'favourite' cock-ups. Does anyone remember the September 1995 Contents page which had half of the product descriptions pasted in from the previous month? Did you notice how we never once managed to get all the folios (page number tags) to line up? Then there was the time someone 'forgot' to put CDs on all the overseas copies of the June 97 edition – how we laughed... Many moons ago some not so bright spark entered an obscene word as his player name before taking screenshots for a game review. A bit of a laugh? Not when they all have to be returned to a warehouse to have little old ladies blank out the offending word with a marker pen on well over 100,000 copies. Then there was the wrong bar code on the July 98 issue...

In case we forget to say it anywhere else in this issue, goodbye! We love you! Thanks for reading and knowing which was the best Amiga mag in the world! See you all again soon...

What they wanted to say

Some quarters of the Amiga trade felt they had a few things to say, so here they are...

Petro Tyschtschenko, Amiga International

"The grandest of all laws is the law of progressive development. The CU Amiga Magazine always supported our beloved Amiga. It is really hard for me to realise that after October 98 no new issue will be published... I would like to thank you all, the editors and employees behind the CU Amiga Magazine, who have done a great job. Thanks. My special thanks to Andrew Korn and Tony Horgan."

David Link, HiSOFT Systems

"HiSOFT is sad to hear of the closure of CU Amiga. We would like to thank the magazine and all its staff and readers over the years for their loyal support of the Amiga. We would also like to assure everyone that we are fully committed to the Amiga platform and will be here for its users as long as they need us!"

Andre Reed, Crystal Software

"I can honestly say that CU has retired as undefeated champion of the world. I wish you all the very best for the future and only hope that when the Amiga becomes more profitable for EMAP that we will see CU Amiga emerge to reclaim its crown. I would like to say that Crystal Software is still committed to the Amiga games development 100%. And I urge anybody who feels its time to pack the Amiga into its box to re-consider."

Ian Greenaway, White Knight Technology

"White Knight Technology are very sorry to hear of the demise of our favourite Amiga magazine. Over the years it has enabled us to build our business significantly, and much of this can be attributed to the good, honest advice from the CU editorial staff. We are a company committed to the high-end Amiga user, and whilst this came as a shock to all of us here, we have a dedicated and loyal customer base, and we will continue – as will the Amiga. We wish every success to the CU Amiga team. See you on the flip side !"

Chris Wiles, Active Technology

"We thank CU Amiga for the support they have offered us during the last few years and we look forward to supporting the Amiga market with new products to be launched at the Cologne show in November this year. We are carrying on 'as normal' and users will be able to find our advertisement within Amiga Format from next month."

What we've always wanted to say

"Dear CU. I have an A500 with 1MB & no hard drive. You should have more coverdisks that run on this kind of system."

Oi! A500 owner! NOoo! We won't put hugely dated rubbish on the disk for the sake of a small minority of people who have a laughably outdated computer and can't be bothered to upgrade it. Do PC mags get people writing in and asking them to put something on their coverdisks that runs on a 640k mono AT?

Ok, so some people just want the odd game of SWOS, fair enough to them. They don't write in to us and moan, and they don't delude themselves that their primitive computer is capable of running decent modern software. But to the rest of you: Please, get real, get a decent computer, and get a %@*&ing life. People like you brought the Amiga down.

You Have Been Reading...

We couldn't think of a better way to pay tribute to those who have helped shape CU over the years than printing a load of embarrasing old pictures, so here's a selection of them in no particular order...



Name: Jason Holborn
Former position: Freelance Contributor
Most likely to say: "Oo-aar, it be nice in Frome"
Last seen: in Frome (probably)



Name: Andy Leaning
Former position: Technical Editor
Most likely to say: "Do you like my novelty tie?"
Last seen: editing a medical supplies trade paper



Name: Jon Sloan
Former position: Deputy Editor
Most likely to say: "Watch it! I'm Third Dan in Tae Kwon-Do"
Last seen: swanning around as a big-shot games PR person



Name: Alan Dykes
Former position: Editor
Most likely to say: "Anyone fancy a Chinese?"
Last seen: tucking into a plate of Singapore fried noodles at PC Gaming World



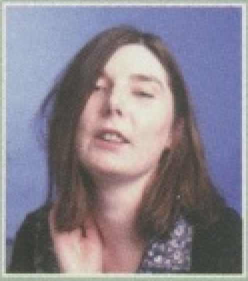
Name: Nick Veitch
Former position: Technical Editor
Most likely to say: "My alarm clock didn't go off"
Last seen: striking curious poses in a certain rival Amiga mag



Name: Mark Patterson
Former position: Staff Writer
Most likely to say: "I'm not into heavy metal any more"
Last seen: leaving for the Far East to seek his fortune



Name: Dan Slingsby
Former position: Editor
Most likely to say: "Let's put a bird on the cover"
Last seen: directing a 'glamourous' photo shoot in Bath



Name: Lisa Collins
Former position: Deputy Editor
Most likely to say: "Does it really give you cancer?"
Last seen: in a cafe in Scotland

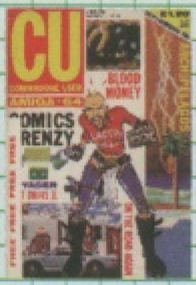
Some of The Many Faces of CU Amiga Magazine



1985



1988



1989



1991



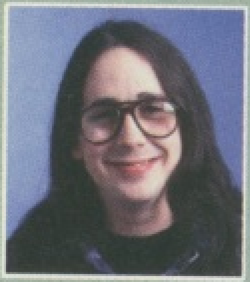
Name: Matt Broomfield
Former position: Technical Editor
Most likely to say: "I'm not being funny, but...[insert offensive comment here]"
Last seen: writing for a PC mag with a lower sale than CU



Name: Matt Broughton
Former position: Games Consultant
Most likely to say: "Arse"
Last seen: blagging free drinks everywhere



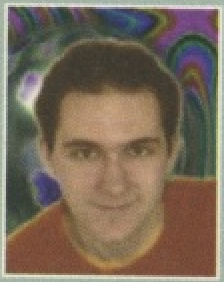
Name: Mat Bettinson
Former position: Technical Editor
Most likely to say: "F*ck! This thing sucks!"
Last seen: surgically wired to an ISDN link playing Quake 2



Name: Tony Dillon
Former position: Games Editor
Most likely to say: "You'll never guess what happened to me today..."
Last seen: flogging "Secrets of Frontier" down Islington market



Name: Dave Stroud
Former position: Freelance Contributor
Most likely to say: "I can't believe it's not Topaz!"
Last seen: knocking on the doors of Amiga Format



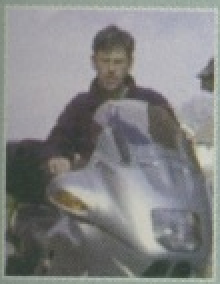
Name: Jason Compton
Former position: US Correspondant
Most likely to say: "You're just going to love this feature idea"
Last seen: at a training camp in Arizona



Name: Andrew Korn
Former position: Deputy Editor
Most likely to say: "Sorry, the Northern Line wasn't running"
Last seen: lecturing art on the Open University



Name: Richard Drummond
Former position: Staff Writer
Most likely to say: "Donald where's your troosers?"
Last seen: trying to convince everyone that he's actually not Scottish at all



Name: John Kennedy
Former position: Technical Consultant
Most likely to say: "no really, you should try WindowsCE"
Last seen: stuck between width restrictors on his BMW bike



Name: Russ Cox
Former position: Production Editor
Most likely to say: "You've got five minutes to finish the news"
Last seen: touting his mobile disco around Surbiton



Name: Neil Bothwick
Former position: CD Compiler
Most likely to say:"...llo Wirenet"
Last seen: making a new life for himself as a Geoff-Capes-o-Gram



Name: Tony Horgan
Former position: Editor
Most likely to say: Mmmmm, Pot Noodle... my favourite.
Last seen: Out on the piss with Kevin Sapwell



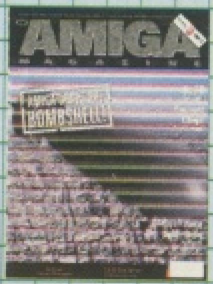
1993



1996



1997



1998

What's happening to The Amiga?

Does the closure of CU Amiga mean the end of the Amiga? The simple answer is no. Don't believe us? In a last effort to remedy that, we asked Amiga Inc to spill the beans. Fleecy Moss - the man Petro calls Flossy - has quite a lot to say.

A few words with Fleecy Moss



Fleecy Moss is not a name many are familiar with. To many people expecting the return of a Haynie or a Sassenrath, Fleecy was just an unknown with an odd name. So who is the man who some people are calling a major computer visionary – and other people are calling Mossy Fleece?

"I am British but currently working in the US." he tells us. I am a project manager and systems architect responsible for implementing enterprise level distributed computing systems. I have been an Amiga user for about 8 years, and started out on a Commodore Pet and Vic20 when I was about 11. I have never looked back.

"What I hope I bring to the Amiga is a respect for its philosophy and community ideals, as well as a good feel for the future of computing and the digital information revolution. With the explosion of connectivity and the ubiquitous presence of digital information, the Amiga is in a unique position to provide the technology to take the world by storm."

Hmm. Sounds promising, but will it happen? It's been a long 18 months of promises for every Amiga user, and a fair few people are losing the faith. Never ones to shy away from asking the pertinent questions, we wanted to know how Fleecy explained the perceived silences.

"The first point I would like to make is that everyone at Amiga Inc. is as frustrated about the time our efforts are taking as is the rest of the community. We want to be using the new machines in our offices now. We are sick of Windows crashing, Powerpoint losing files and email disappearing. We are sick of rebooting, freezes up and the blue screen of death. We want machines that let us do our job and have fun doing it. That machine is the new Amiga."

Don't we all, Fleecy! So why is it taking so long?

"Well, the first thing to understand is that we have only really been able to concentrate on this since April, when Bill McEwen, Allan Havemose and myself were brought on board. The initial ICOA contact helped to firm up this understanding, which is when they appointed Jeff Schindler as general manager, to look into ways of bringing the Amiga back to market.

"Our visibility suffered somewhat also, despite Jeff and Marilyn (Marilyn Flint, Operations manager) putting forwards a number of proposals.

"It was only just after Christmas that Jim Collas found out about us. He became very excited and has since taken us very much under his wing, which has allowed us to progress in leaps and bounds. His presence at the WoA, in spite of his packed schedule was a ringing endorsement of Amiga.

"So really, we have only had the necessary power to move since January, and we have only had the team capable of making the Amiga great again since April."

> **The Amiga is in a unique position to provide the technology to take the world by storm."**

Well, it's certainly reassuring to hear a reasonable explanation of the delays. Sometimes it has seemed on the outside that things were going smoothly but painfully slowly at Amiga Inc. It's good to know that the delays have been precisely because things have not been totally smooth, because at least we can now be content in the knowledge that we shouldn't suffer so many delays in the future. However, delays are damaging, and given that it took so long to get things started, wouldn't it have made a lot more sense to just develop a PPC version of the OS and go that way? There would have been a natural progression, somewhere for current developers to go, and things would start happening now. Fleecy is known to be a fan of the PPC line of chips, but thinks this would have been a bad idea..

" Where would we be? We'd have a standard PPC machine and a five year old OS that runs fast. Our market would still be small, we would have no partners, we would have nothing really special to drive us forwards.

"Rebuilding the Amiga isn't just about rebuilding the machine and the OS. That would be relatively easy (although it would still take a year or more). It's about taking that next step forwards, pushing out into the undiscovered countr[y] defining the future and then claiming it for ourselves. To do that requires vision, cutting edge technologies and most impor-tantly partners. A coalition for the next millennium. We have been working on all of those parts and we had hoped to have everything in place to share with the community at the WoA. Unfortunately, legal entangle-ments meant that that was impossible. As it turns out though, this may have been a blessing since we may now have solution superior to the one we were putting together for the WoA."

> **" A Coalition for the next Millennium"**

What about the OS partnet then Fleecy cannot be specific, but reveals a little.

"What I can tell you is that once we have the deal signed, sealed and delivered (ie; past the lawyers), then we will be able to announce our kernal partner to the Amiga community.

We are very impressed with their product, and the fact that some of their chief engineers still have A2000s in working order made it seem more like a family reunion than a business meeting."

The people who have suffered from a lack of info is of course the average user on the street. Most of us in the industry have at least some inkling that there is more going on behind closed doors than meets the eyes, so why is there such a veil of secrecy over it all?

Even this question seems a dark secret, as Fleecy offered OMERTA like veiled threats of concrete boots and horse's heads if I find out too soon, but was willing to impart two basic reasons.

"a) In creating and trying to sell a vision for the future, we are talking to many companies. They also have visions, product plans and strategies, most of which are the key to their success in the middle and long term. That they are willing to talk to us and share with us is a sign that our plan holds a lot of promise. However, they certainly don't want others knowing about it.

"b) There are large "companies" that already dominate the present in both hardware and software, and they have a lot of clout. Many companies are genuinely concerned about damaging their existing, profitable relationships for the potential of future relationships. We have to prove ourselves to each of them, but it has to be done behind closed doors.

"So, whilst we are in this planning and development phase, then secrecy is required. What you can be guaranteed of though is that when we and our partners are ready, the launch will be like nothing that the industry has ever seen."

Sounds good! Does this mean that Amiga Inc. are planning – and have budgeted for – a launch comparable to the 1984 Macintosh "think different" campaign which caught the imagination of the whole industry?

"...the launch will be like nothing the industry has ever seen."

"With the launch of the Mac in '84, there was only one company. As I have mentioned before, the key to all our successes with the launch of OS5Prod will be that we are working in conjunction with partners. We hope that all will launch their first generation products at the same time, using their own marketing strategies, but that the common theme of "powered by Amiga" will link them all together, providing a very compelling argument for choosing Amiga enabled devices and products."

Of course the most compelling argument will be power. We have heard much about the superchip, although it is all pretty vague. The specs announced so far are impressive, but not world beaters on a money is no object basis. So how good will it really be? Is it really as radical as all that?

"The beauty of the superchip is that it offers a very impressive across-the-board price/ performance ratio. Thus we can have our webTV/intelligent television products, our $500 A1200 machines, our $1000 desktops and our $2000 workstations and servers.

"Also remember, as the Amiga has proved before, that it is not just a question of processor speed or fill rates of hardware. It is about blending the OS and the hardware together in perfect harmony to create something that is so much more than the sum of its parts. In Allan Havemose, we have one of the most talented OS designers on the planet."

OK, but there's more than one company eyeing up the integrated multimedia system market. How will the new Amiga compete with the likes of the Sega Dreamcast and the Sony Playstation 2?

"They are both likely to be very strong products, giving people $2000+ computing power in a $300 package. We have the technology to make these look very ordinary."

Well, if that is really true, there will be a lot of happy Amigans. Playstation 2 specs are a couple of months away from announcement, but Dreamcast already has the world's games developers in raptures. What will they make of a computer that makes them look ordinary? Fleecy continues.

"We also feel that they are first and foremost games machines which only pay lip service to the digital conver-gence market. There is no desktop or workstation that can play the Dreamcast CDs (that a normal user has anyway). They are very fixed function devices. They are definitely moving in the direction of our market though, and if anything they give us added impetus to get moving."

OK Fleecy, enough about the NG Amiga, our readers want to know about the classic line.

"Our original plan saw us having OS5Dev out before any classic Amiga upgrade (that would be worth calling an upgrade anyway) could be completed. Since the disappointment we had at WoA, we have been inundated with mails from people asking us to please reconsider. We are now looking at our schedules, our resource budgets, and I have also been very active in the on-line community, chatting to users, developers, retailers and anyone else that can sit on the other end of a modem. If we can satisfy ourselves that we have the time, and that there is the demand for a classic Amiga upgrade, then we will put a plan together to make it so.

"From what we have heard so far, the Amiga community would like us to provide an upgrade offering new features and functionality that allows people to upgrade their machines and provide a much higher baseline.

"This is turn would provide a much higher new baseline for software developers, allowing them to show off their talents to the full. In addition, the extra demand for accelerators, CD drives, sound and graphics cards and PPC co-processors should see a boost in the retail market. These are all good reasons, as far as we can see for an upgrade. Please stay tuned."

"The Amiga community would like us to provide an upgrade offering new features and functionality."

That sounds dangerously close to an official sanction. Does this mean that despite selecting something else for the long term future, PPC could be the official next CPU of the Classic Amiga?

"If we did an upgrade, it would be done because a) the community has asked for it and b) we saw the period of overlap between the classic and the new Amiga as being too long. In that case, a strong upgrade would hopefully serve to make the transition much less painful.

"However a transition it would still be. Any upgrade would be the last official incarnation of the classic Amiga line. OS5Dev (for developers and curious users) and OS5Prod will be the next Amiga products. So we cannot say that PPC would be the next CPU of the classic Amiga line because, as far as we are concerned, the classic goes into graceful retirement when OS5 coming into being.

"We see the transition taking from 18-30 months, which is why we think Amiga users should upgrade their classic systems, and should buy new software, peripherals and cards. At the moment, there seem to be several compelling arguments for an upgrade, including the fact that the classic Amigas will continue working long after OS5 is released and will continue to give pleasure to many. I know mine will stay plugged in until every chip and track has burnt out.... I still have to finish Cannon Fodder."

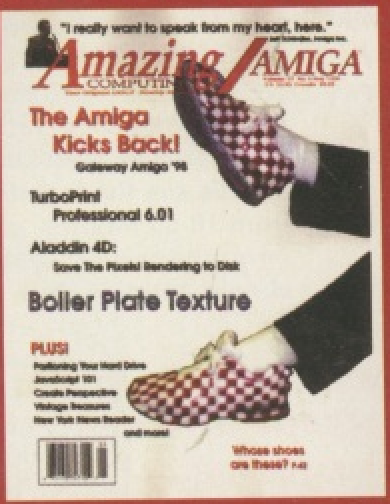
Well, there's a good reason for the New Amiga to have a nice built-in classic Amiga emulator as standard if ever I heard one! Thanks, Fleecy.



Further Reading

Despite what we might have previously had you believe, CU Amiga is not the world's only Amiga magazine. Here's a selection of the most prominent alternatives from around the world. Check them out.

Amazing Computing/Amiga



Amazing Computing/ Amiga is the longest running monthly Amiga periodical in the world (first issue released January 1986). AC is the only North American full colour monthly publication and it is distributed through subscriptions and newsstands.
Issue price: $3.95US
US/Can: 1-800-59-Amiga
Others: 508-678-4200
www.pimpub.com

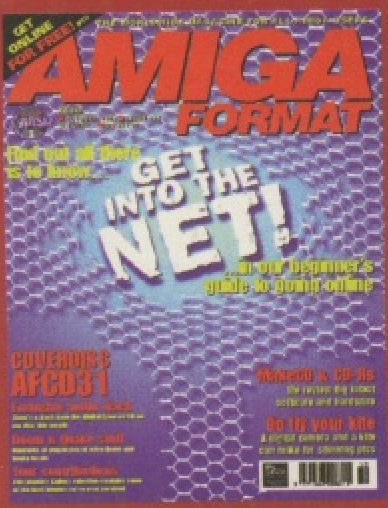
Amiga Informer



The Amiga Informer magazine is a bimonthly, grayscale publication produced in the US for nearly the past three years catering for broad-based Amiga users. Subscriptions are the best way to get The Informer, but plans are in the works to bring it to a UK distributor soon.

www.amigainformer.com
email: eldritch@idsi.net.

Amiga Format



Amiga Format is based in the UK and covers all areas of general Amiga useage. It's published 13 times a year and is available on selected newstands internationally as well as subscription. Price: floppy disk (x2) £4.50, CD £5.99.

Tel: 01225 442244
Subs: 01458 271102
email:
amformat@futurenet.co.uk

Amiga Info



AmigaInfo is a Swedish magazine for Amiga and Linux users. The Linux section is not platform specific.

Swedish: AmigaInfo är en svensk tidning för Amiga och Linux-användare. Linux-delen är för alla plattformar.

www: http://www.xfiles.se
e-mail: info@xfiles.se

Amiga Survivor



Amiga Survivor is a brand new 40-page monthly magazine dedicated to the Amiga games scene. It features commercial, licenceware, shareware and freeware reviews, previews and news.

www.crystal-software.com/AmigaSurvivor/survindex.html
Tel: (+44) (0)1992 505803

New Tekniques



NewTekniques magazine covers all NewTek products, including LightWave 3D, Aura, Inspire 3D, the Video Toaster, and the Video Toaster Flyer.

Subscription info:
www.newtekniques.com.

Free daily news updates:
http://www.newtekniques.com/TekTicker

Bill Gates Halloween Mask



Directions

• Cut with sharp Knife or scissors around Bill's head, avoiding the temptation to cut off his ears.

• Gouge out his eyes with a pencil or spoon.

• Spike small holes in the sides of his head near the temples for maximum pain (these also serve for attaching string to his face so you can wear him.

PART 2

NETWORKING made simple

Amiga-to-PC Networking

Many Amiga users now use or own PCs, either through the necessities of their work or study, or simply because there are now a plethora of unique and "industry standard" software applications and hardware upgrades for the PC platform that will sadly never make it onto the Amiga.

Needless to say, it is highly likely that you also own either have long-term access to a desktop or laptop PC in addition to you Amiga. If you are one of the thousands of people who run a PC along with their Amiga, today is perhaps the best time ever in Amiga history to attempt networking the two machines together.

Why bother

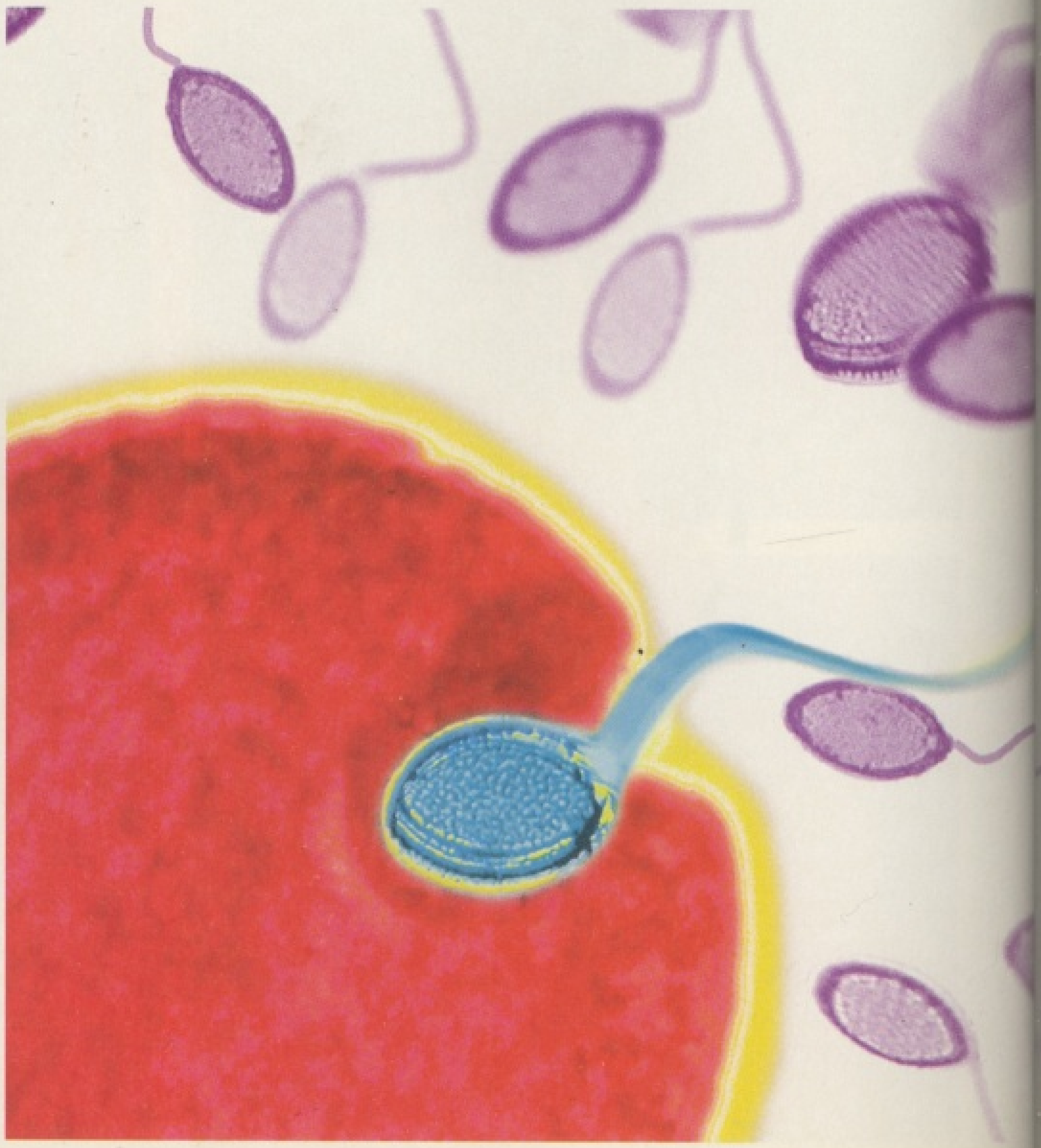
If you use both, you no doubt swap files between them. The lack of a high density drive on most Amiga machines makes the laborious process of moving software on floppy disks even worse than it already is. What if you could take all that effort out of the equation? What if you could use the high density floppy drives of the PC for your Amiga (remember HD Amiga drives are hideously expensive, as is the combination of a PC floppy drive unit and a Catweasel if you aren't using HD disks every day). But why stop there - you could do the same thing with the floppy and CD drives on the PC. If you have an Ethernet link, you can even access these at full speed!

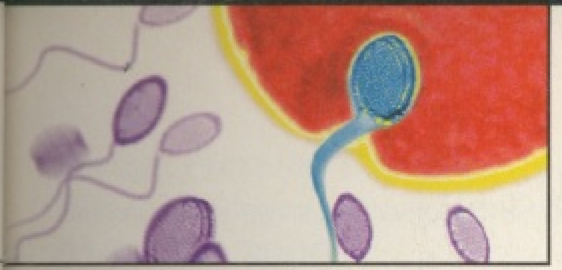
But wait! There are other capabilities within a decent PC that can only benefit your Amiga. Graphics cards for the Amiga are expensive, whether you go Zorro, PPC or even AteoBus; you are still looking at spending £200+ for one. What if you could use you PC to display your Amiga screen, taking the load off the graphics chips and utilising the huge screen sizes, True Colour and High Colour modes that modern PC graphics cards offer. All this is achievable by linking your Amiga to a PC.

Creating a cross-platform network

As with the Amiga-to-Amiga networking discussed in part one of this series, your Amiga-to-PC network can be as simple as just cobbling together a basic null-modem link between computers and using terminal-based comms packages on either end for basic file transferring. Then again, there is so much ingenuity among the Amiga programming scene that a number of specialised and truly fantastic software packages have been developed to cope solely with connecting a PC to your Amiga. These offer you the chance to do things with your new network that simply would be unimaginable in a PC-only environment.

These options range from basic one-way file transferring and drive sharing to a full two way data communication with printer and even modem sharing to the ultimate concept, the ability to converge the two machines into one system, using one monitor, keyboard and mouse to operate both machines simultaneously. Obviously, the more advanced your intentions or requirements become, the





The available ranges of add-on I/O ports are the following:

Active Technologies, 01325 460116, www.active-net.co.uk

Hypercom1: Clock port single serial port for A1200, £39.99

Hypercom 3: Clock port twin serial and single parallel ports for A1200, £79.99

Hypercom Z3: Zorro 2&3 twin serial and single parallel ports for all Zorro-based machines, £74.99

Hypercom Z4: Zorro 2&3 four serial ports for all Zorro-based machines, £89.99

Eyetech, 01642 713185, www.eyetech.co.uk

PortPlus: Clock port twin serial and single parallel ports for A1200, £79.99

PortJnr: Clock port single serial port for A1200, £39.99

Hisoft, 0500 223 660, www.hisoft.co.uk

Whippet: PCMCIA serial port for A600 and A1200, £49.99



more expensive the software will also be, with commercial software options ranging from under £20 up to around £100 for the most advanced systems.

Hardware

There are basically three hardware methods for forging the link between the two machines, the most basic being a parallel link cable, which will provide the cheapest, easiest, but most CPU intensive method of connection.

From there is the trusty but ageing null-modem cable. Using the serial ports of the machines to create a link by cross-linking the send and receive lines results in a connection which functions just as two machines connected across phone lines with modems would. This bandwidth is higher (so therefore faster), more reliable and far less intensive on CPU time than a parallel link, as well as being very cheap.

Then there is Ethernet, which offers vast bandwidth and super-fast transfer speeds, even less CPU intensive than serial and the ability to connect into networks of more than two machines, unlike serial or parallel.

Parallel can transfer on average 50K per second, Serial about 115.2K and Ethernet around 10Mb and higher. By using add-on high-speed parallel and serial cards on both systems, particularly on the Amiga side, you can often double the parallel transfer rate and quadruple the serial rate. This is because the built-in ports on the Amiga are particularly badly implemented; not to mention limited by the ageing CIA controller. Boards such as the Hypercom put this right by employing more up-to-date I/O hardware.

Conclusion

Network solutions need not break the bank in order to deliver decent results. File sharing, which is what the bulk of users need, can be done with enough change from £20 for a pint of lager. For a few pounds more, you can go the whole way and truly combine your machines into one fully integrated system. No other computer offers this degree of integration, surprising in this day to a PC owner, but if you have used an Amiga seriously, you'll already know that this level of flexibility is inherent to almost all Amiga software and hardware.

Particularly while we wait for the new Amiga hardware to emerge, linking your Amiga to a PC, you can begin to experience much of the PC technology that the recent years of inactivity from past Amiga owners has seen overlooked and dismissed as viable for our own platform. Cheap hard drives, graphics cards, sound cards, monitors and keyboards are all within reach, without having to tower or surgically dissect your motherboard, just with the use of a cable and some very enterprising software!

Serial and Parallel

If you are not going to go down the Ethernet road, then you should seriously consider using an add-on serial or parallel card rather than the in-built ports of the Amiga if your network usage is to be anything other than light.

Add on cards are available in various forms, either as Zorro cards, PCMCIA adapters or as plug-on boards for the clock port of an A1200 (if you actually have one that is). Sadly if you are an A500 user, your options are pretty much zero I'm afraid, unless you can find one of the few serial adapters that connected to the side expansion slot, all of which went out of production many years ago.

Network PC
£17.99, Weird Science, www.weirdscience.co.uk, 0116 246 3800

Network PC is by far the simplest pre-packaged method of getting your Amiga talking to your PC.

The pack consists of a couple of floppy disks containing the necessary driver software, a small but highly useful instruction book and a laplink parallel cable. Like the former two packages, Network PC really needs Windows 95 or 98 to work properly, although you can actually use it under Windows 3.1, but with a great deal of difficulty, not to mention defeating the whole point of the Network PC system.

Unlike Siamese and Amiga Forever, the connection available here is only one-way, with the Amiga gaining full access to every drive device (hard drives, CD-ROMs, ZIPs etc.) on the PC. This is implemented in a way that these drives appear and can be used just as if they were actual devices connected to the Amiga. By this point you should have noticed the striking similarity between this and ParNET, the Amiga-to-Amiga package covered in part one.

Connection between the two machines is achieved using the supplied cable, which attaches to the printer ports on each machine. Much like a ParNET link, on the Amiga side Network PC mounts a drive-like device within Workbench called PC: which when opened reveals a selection of sub-directories. These are mapped to the physical drives fitted to the PC which your machine is connected to, as well as mirroring the PC drive names (A: B: C: and so on). The PC: device and its contents are treated just like any other mounted device and can be accessed by any piece of software that runs under Workbench and uses a normal file requester. Even better is the fact that the PC: device is mounted with an icon, letting you access it via the Workbench desktop, allowing drag-and-drop file operations and mouse control unlike many early ParNET systems, which were only reachable via a Shell and through requesters.

The supplied software is exceptionally well crafted, considering how small the whole package is. For the Amiga side you get one floppy containing all the necessary software and a readme file, with hard drive installation handled by a standard, but well written Commodore installer script. What's more, such is the thought and consideration put into this package, the Amiga disk is bootable bootable, allowing you to test a connection or use a Network PC link on an Amiga without a hard drive.

The actual software itself can be practically transparent to the user, as you can either start the network



▲ Network PC allows you to mount a PC's drive on your Workbench.

manually as needed (done by clicking on the MountPC icon in the newly created NetworkPC drawer) or copy the launcher script into your WBStartup drawer. Doing this allows MountPC to run on start-up and sit in the background while it waits for the PC on the other end to finish the connection. Running Network PC this was and not actually engaging the network at both ends won't impair your Amiga, a great boost for people who want networking on demand, but without having to think about running software to trigger it.

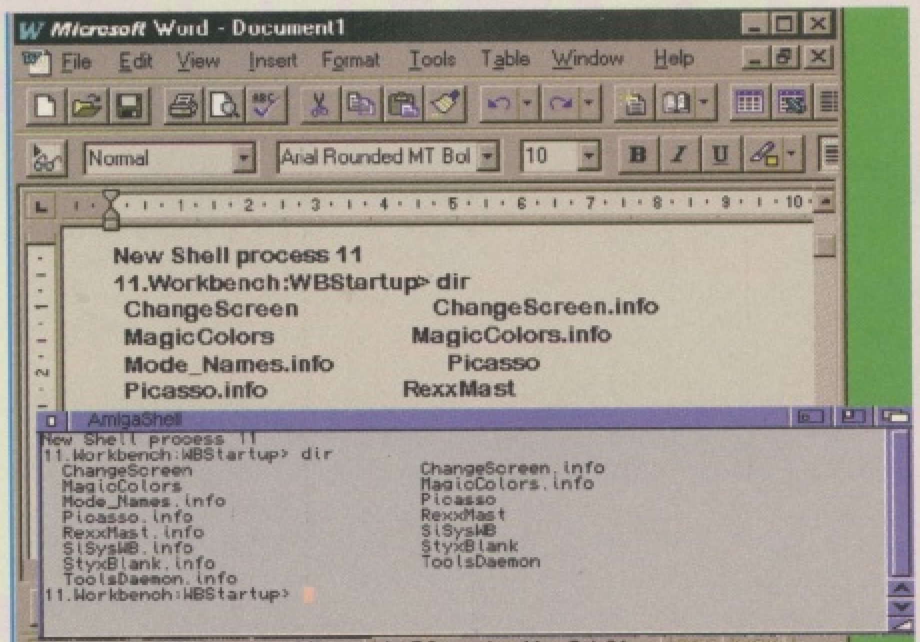
On the PC side, you again get just a single floppy, containing all the equivalent software, this time with installation handled by the Windows InstallShield script (the Windows equivalent of the Commodore installer). This deposits two small DOS programs on your PC, one for configuring the PC end of things, and the other to handle the connection.

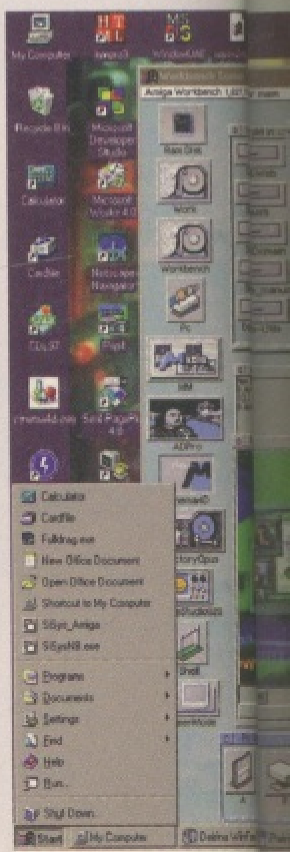
The configuration program, while small is very useful, allowing you to switch between printer ports if you have more than one, as well as letting you opt for a serial link instead of the supplied parallel cable. The actual comms program, while DOS-based, will sit minimised on the Windows 95 start-bar, and unlike Windows 3.1, will happily multitask in the background, allowing you to continue using the PC while letting the Amiga access its drives whenever necessary.

In practise, Network PC works extremely well, as it should do considering its basic capability. Windows 95 long filenames are supported and Amiga applications can be installed and run from the remote drives. The software on both sides is extremely stable, while the supplied cable is of equally good quality.

Sadly, as with all parallel connections, you can forget about multitasking while transferring data, as both machines begin to grind to a halt, only more so on the Amiga. Not a real problem if you are a light or occasional user, but if you plan on PC networking on a daily or heavy basis, then this is not for you.

▼ Siamese allows cut and paste from an Amiga to a PC.

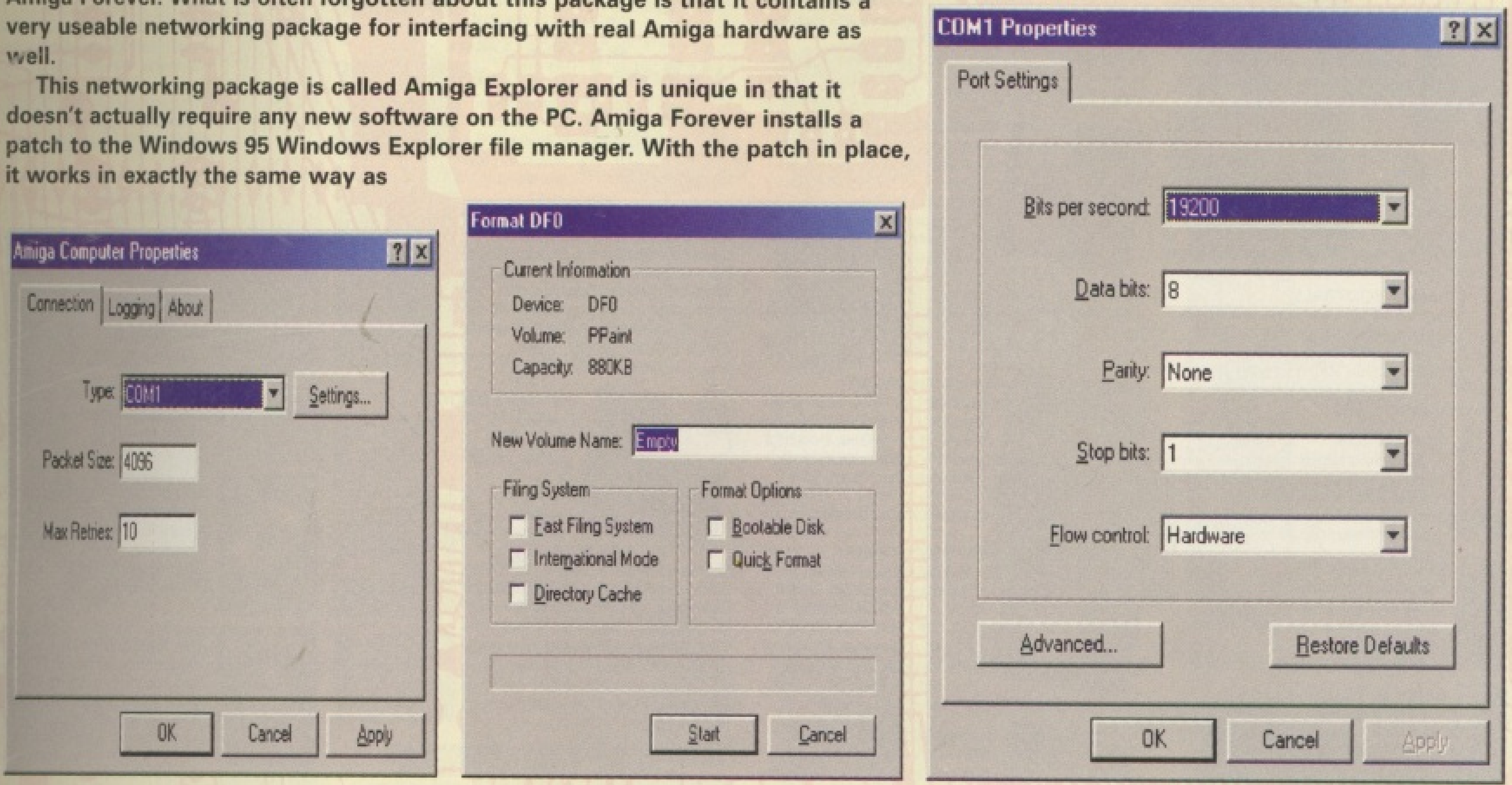




Amiga Forever £39.99, Weird Science, www.weirdscience.co.uk, 0116 246 3800

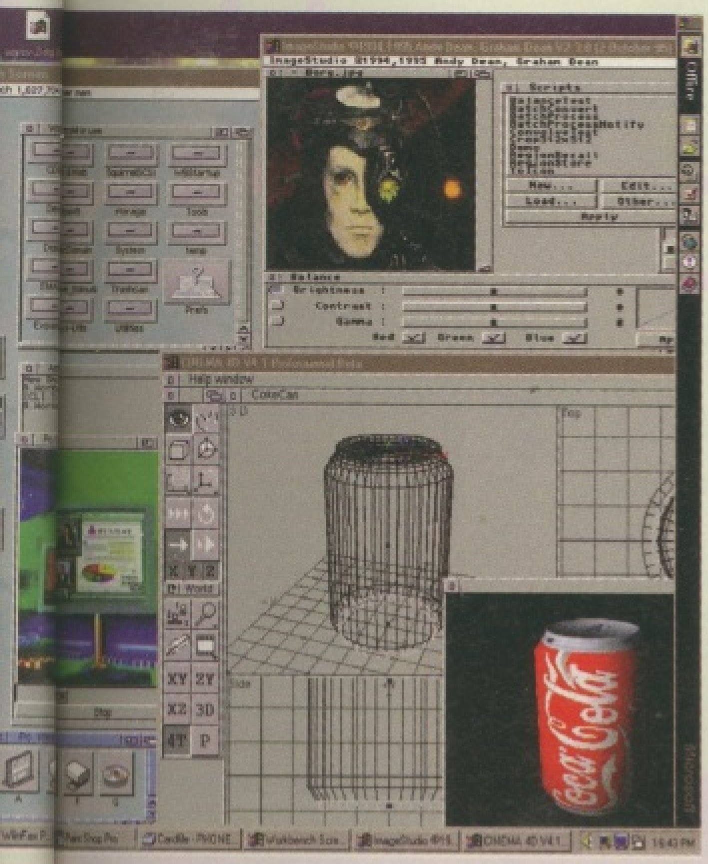
Most people think purely of emulation software when they see the mention of Amiga Forever. What is often forgotten about this package is that it contains a very useable networking package for interfacing with real Amiga hardware as well.

This networking package is called Amiga Explorer and is unique in that it doesn't actually require any new software on the PC. Amiga Forever installs a patch to the Windows 95 Windows Explorer file manager. With the patch in place, it works in exactly the same way as



▲ Setting up the Amiga Explorer. utility for transparent serial networking between a PC and an Amiga, with the Amiga drives mounted under the Windows 95 filesystem.

▼ Siamese allows Amiga applications to open on a Windows screen.



▼ With ShapeShifter or Fusion, Mac screens can be retargetted over Siamese too.



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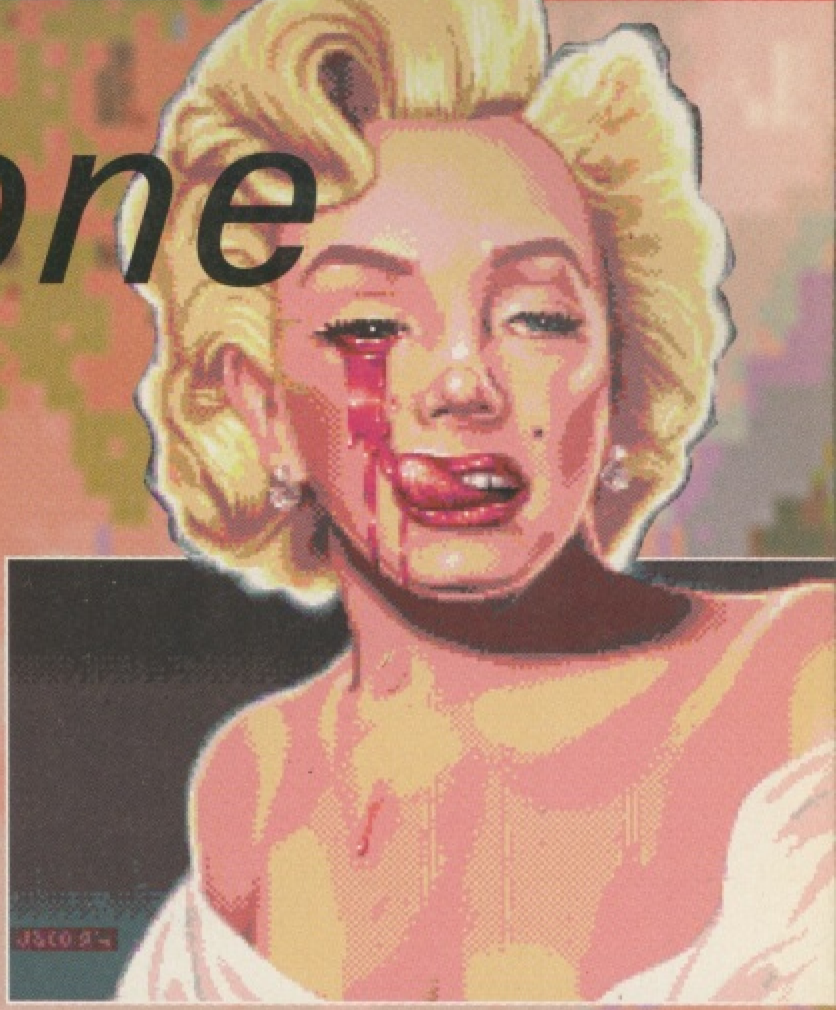
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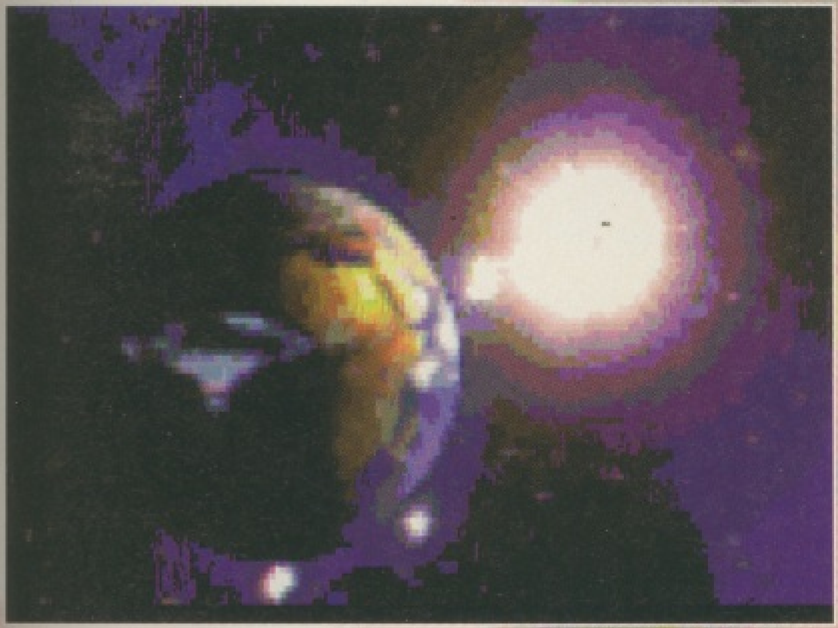
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It's All Gone Swirly!



Right from the start, the demo scene has been at the cutting edge of Amiga software developments, pushing the hardware to extremes to perform the impossible. But why? And what sort of shape is the scene in these days?

'Humanoid – dit, dit, doiiii!" was a noise you wouldn't expect to hear from a Commodore 64, but some time in 1988 a couple of inventive coders managed to get it to do so. A manicly strobing series of acid smiley faces were put together with a rough and ready rendition of Stakker's Humanoid, a big rave anthem of the day, and squeezed into a modest C64. Previously in my experience 'demos' had been twee little combinations of bouncy coloured bars and jangly versions of crap tunes. It was the first demo I ever saw that measured up to established forms of art and entertainment. I was excited.



In the begining

The arrival of the Amiga on millions of desktops around the world provided a bigger, better, brighter stage for these quirky code artists. While the point of many demos was still to act as a flashy front end to cracked software, legitimate coders began to distance themselves from the pirates and put their efforts into achieving impossible audio-visual effects. From these initial intros, mega-demos emerged as multi-disk extravaganzas designed purely to make you go "Wow!". But enough of the old days. Recently 'the scene' has slipped from prominence in many Amiga circles, so has it had its day, or is it just that it's gone out of fashion? We spoke to members of Nerve Axis, now the UK's only active group on the international scene.

Tango of Nerve Axis: "The size and feel of the scene has changed dramatically. The Amiga is now approaching (or has approached?) the cult status era, and as a result of this, a lot of talented individuals have moved to the PC and/or moved into the commercial arena. The global spread of the Internet has brought the remaining people together in way never before possible, but at the same time there is always a destructive and pessimistic element within the scene that sees doomsaying as their only 'creative' input. A shame.

"The scene is in a way a reflection of the Amiga hardware. When the machines were being produced and sales were booming, the scene flourished and popularity grew, but when Escom took over and the uncertainty set in, people moved away in droves and others refused to take the plunge and buy into a financially unstable platform, and so went toward the PC.

"On a happier note, the quality of work now produced is certainly a lot higher than back in the late 80s/early 90s but that's only to be expected really as we have more resources at our fingertips. The thought of producing a demo purely to be run from hard drive would have made most people keel over with shock in 1992. On a sadder note, the quality may be improving but the quantity is shrinking.

"Old hands constantly talk about the 'old days' in an affectionate manner and it's true, the early 90s were the best years for a lot of people, simply because the scene was so active, but times change and we must change with them. People are still supporting the Amiga and there's no reason for that to change."

Dawn of the Net

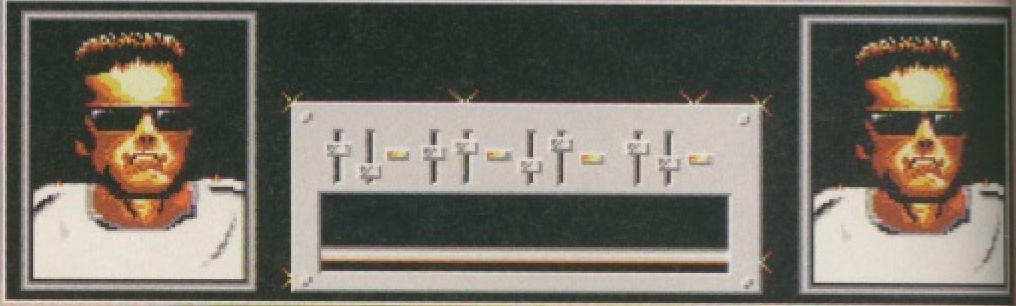
The Ripper: "Internet is the name. The history of the scene can be split into two eras, before and after Internet. Before, contacting people was something extremely difficult and expensive, so, all members of a crew would have to live if not in the same



town, in the same area. Now it's possible to have productive groups featuring members from different countries. Maybe the 'spirit' was better once, but I trust in progress, and I prefer nowadays..."

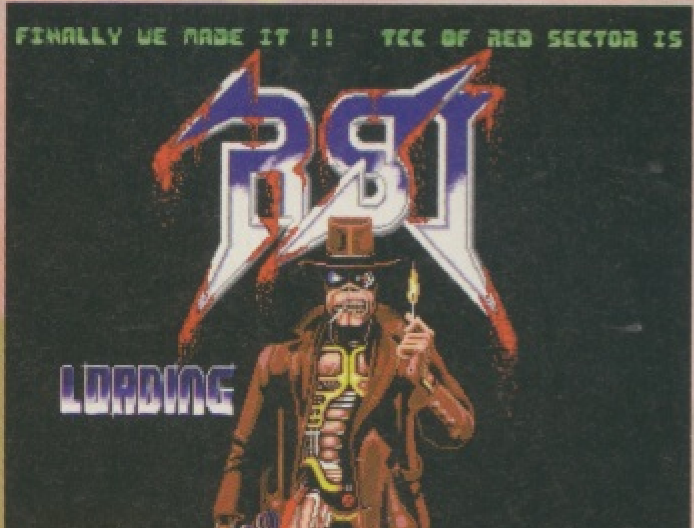
DarkHawk of IRIS: "In those early years, the scene was a forum where discoveries were made each day. There was a feeling of pioneering, of doing something none had done before. To push the limits of what was possible became the norm, to make world records in code and so on. Now, we've tried most of what can be done, or at least we think so, so demos tend to look like one another, and it's hard (at least for me and other diehard nostalgics), to feel this 'rush' in the stomach, when seeing a new demo. Still, the scene continues to fascinate us, and we're a kind of community where everybody knows each other"

"In 94/95 the scene hit an all time low in productivity and members, but after that, we've slowly become stabilized again, and now the scene is quite an active place again, thankfully. For me, the best scene year was 1991 though."









But why?

So at least it's out in the open that it's not what it used to be in a number of ways. Why then do those still involved stick with it?

The Ripper: "I started because 'sceneing' was a way to get famous, to get my work appreciated and get respected by other people, even if only in a very restricted field. Now that I'm 24 years old, sceneing means mainly believing in 'differences'. Believing in a form of art which is not 'official' or 'recognised', using a computer which is still chosen and not imposed by the market, and getting in contact with people from everywhere. Just think that in these seven years I've had the opportunity to share ideas with scene people from countries such as Brasil, Israel, South Africa, Saudi Arabia and even Kuwait!"

Ganja of Nerve Axis: "I understand people who aren't interested in them, especially those who weren't in the early 90s when demos didn't look nearly as impressive as they do today. Then again I don't understand people who are interested! Don't understand myself either I guess."







Crash: "I still think the main reason anyone 'does' demos is for the fun of it. I know that's the case for us. Working to a deadline like we did for The Assembly 98 [scene party] is certainly hectic and trying to organise a group when it's working so feverishly towards a goal is sheer madness! For Nerve Axis it's nothing more than a hobby, as almost all of us are in full time employment so it's a great way to relax?!?!

"The financial rewards for parties can't even lead to a break even situation nowadays, so there's certainly no profit for the work. There are also the rewards of 'fame' within the scene, something we're only really starting to experience recently with the Relic demo from Assembly 98. There's also the immense buzz you get seeing your demo shown on a huge projector screen in front of hundreds of people. It's certainly a great feeling when everyone's talking about a project on which you've worked so hard. Relic to us was around eight months."

The piracy connection

Crash explains... Initially, they were one and the same. The demo scene really evolved from the 'warez' scene, from the small intros (cracktros) presented on the front of cracked programs to show off the name of the group which cracked the game.

These small intros then evolved into full productions in their own right, through to single file demos on a disk (which were spread as compilations by groups such as SAE), to trackmos (autoloading custom disks with as much crammed on one or two disks as possible), to megademos on ever-increasing amounts of disks. The final progression is where we see the demoscene today, producing large hard drive-only productions.

The heritage still exists though, as groups still make intros today. The parties still hold 64K and even 4K intro compos, to see how much people can cram into a set limit. These are often great feats of programming, and some groups specialise in these and not 'full' demos.

Ten 'things' about the scene... according to Tango of Nerve Axis

1. It's not a geek thing. We are by and large (fairly) normal people with a life outside of the monitor. An interest in computers is becoming more the norm for the 90s individual, we were just ahead of our time in taking it up as a hobby.

2. If you can program, write music, draw pictures then load up your Amiga, get in touch with someone on the Internet and become involved in the Amiga scene. It is not just limited to some small clique that accepts no new members. New talent is always welcome and with a decreasing user base I think the Amiga needs all the help it can get. Remember, everyone started off somewhere with a vanilla A500 (or 1000) so don't be put off if you don't think you're good enough. Persevere!

3. Please don't confuse the creation of demos with cracking. They started from the same point but the divergence has widened as years have gone by. Now a gulf separates the two. At the moment diskmags and demos are pretty much the only thing keeping the Amiga scene in one piece.

4. Attend a scene party. Whether it be in your own country or one abroad. Avoid the kids playing network Quake and try socialising. Parties aren't just about staring at a computer screen for 3 or 4 days, they're about meeting the people you talk with on the Internet, or other members of your group who live in a different country. Try it. It truly is a superb experience.

5. Read the disk magazines available, such as Pressure, ROM, Generation, Seenpoint, Showtime and The Official Eurocharts. These will give an insight into what happens, who are the movers and shakers and upcoming events. It certainly can't hurt, and in some cases you may be ideally suited to contribute. Plus it should shock most of the new UK people into realising that mainland Europeans speak and write better English than half of the UK.

6. Nerve Axis is currently pretty much the only true Amiga scene group left and actively supporting and releasing in the United Kingdom any more. I honestly fail to remember when I last saw a real and proper demo from an English group other than Nerve Axis. At a guess I would say some time back in 1996 perhaps.

7. The scene is still alive. So why doesn't the commercial side of Amiga realise this? All this talent sitting here and doing it for fun. Instead of using old anims to show off the Amiga in a shop window, why not get in contact with a 'scene' group and commission them to design a fullscale demo to run and make prospective buyers go "Wow". Most of these guys can be bought for little more than a kebab! Well, maybe throw in a Coke as well. We also cater for childrens parties too.

8. Not everyone involved on the scene is under 16. Most of the 'big' names still active and enjoying themselves have been in this game since they were kids. I'm one of them. Pretty much every other member of Nerve Axis is the same. We've grown up with this machine. Some of us can even grow facial hair. Cool.

9. Hey World Of Amiga. Give the sceners something too. Lend us your ears instead of simply talking with the journalists. If I fill in one more questionnaire about the 'future of the Amiga' only to find no feedback and nothing changes I think I'll scream. Take notice of us as we're the ones who keep buying the new technology.

10. Can't think of a number ten. Sorry.

Where to next?

What of the future then? Does the scene have one at all?

Crash: "The Amiga demo scene is currently developing towards cult status, something akin to that now enjoyed by the C64. People at Assembly 98 were very impressed at the quality of the Amiga demos and intros in the competitions, and a lot of them put many of the supposedly superior PC to shame.

"There have already been a couple of PPC demos released for the Amiga, neither of which are really anything special. I guess with this new processor, it's a learning process and everything really has to start all over again. I can see the demo scene dividing somewhat – into a PPC direction and also many people sticking with the 'Classic' Amiga. I foresee the Amiga still being around at the parties in five years time, and hopefully even longer. While the new machine(?) and the PC get more powerful, there will still always be the challenge to see what people can do with the 'limited' Amiga."







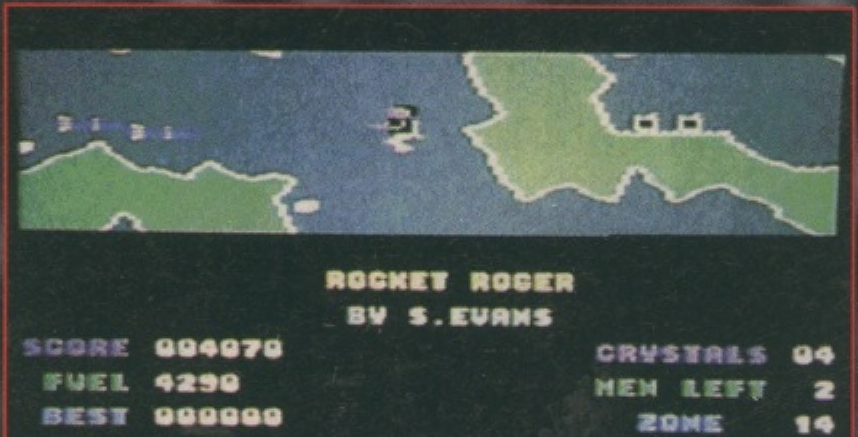


If you'd like to get in on the scene, make yourself known to any demo group you like the look of (investigate the demos' readme docs for contact details) as they're always open to newcomers. Specifically, IRIS are after a talented pixel graphician but whether you're a coder, a graphic artist or a musician you'll be welcomed into the fold, providing you bring something to the party!

Tony Horgan

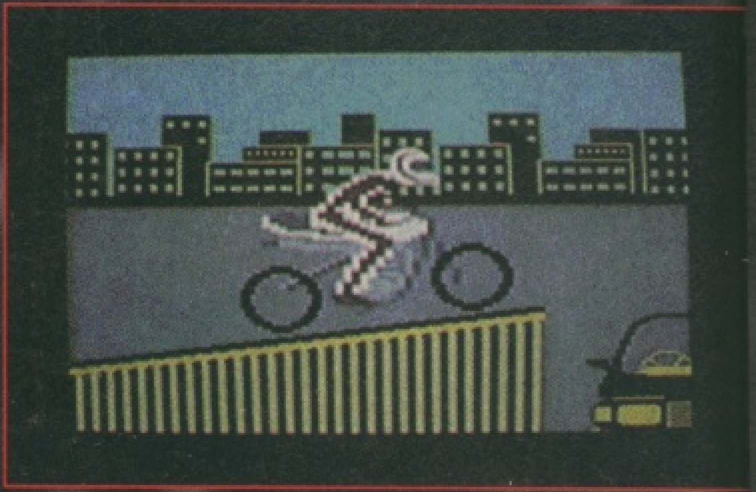
Screen Scene

Time for us to put away our joysticks and turn the volume way down - this is the last ever Screen Scene. CU's longest running section finally goes to that great final level in the sky.



▲ Rocket Roger (not "Rocket Todger" as was initially typed on this caption) in all its 1985 'glory'.

▼ Eddie Kidd Jump Challenge from way back in 1985



CU Amiga Magazine has two survivors from the old days of Commodore User: News pages and Screen Scene. We're not sure exactly when it all started because records do not go far enough back into murky prehistory to record the origins of this section, but it has been going for almost fifteen years. That decade and a half represents the bulk of the history of the computer game. Sure, many of us wasted our childhoods skiving off school to play Space Invaders a few years before that, but Screen Scene has been here to watch computer games transform from 8 colours and 5K to the 24-bit CD-ROM games of today.

Sadly, as the years have gone on, more and more of the most exciting developments have passed us by, as modern games designers jump onto the latest technological marvel to show off their prowess.

About a year ago Screen Scene underwent a significant change in attitude. The old attitude was good for the days of plenty but bad for the more recent lean years. Instead of taking whatever games were offered to us by ever less interesting games houses, we decided to ditch the ease of press releases from second rate games houses, and seek out the best games talent on the Amiga wherever it may be found. We are glad to report that we found it everywhere. We have seen some truly exciting designs, such as Explorer 2260 and Foundation, some stunning graphics from the likes of Genetic Species and Napalm, and some amazing game engines like those in Lambda and Virtual Grand Prix. In some ways the games scene on the Amiga today is better than it ever was, as at last people have started to upgrade their machines to a level capable of giving games writers the freedom to create the games they really want to write. We've seen some truly excellent games recently, with more to come. They haven't been plentiful, but then given the size of the market it is more than we could expect and I'd like this opportunity to say a big thanks to all the games developers out there who have slogged away writing some brilliant games that would probably have made a lot more money elsewhere.



Late Putty

When we put TFX on our coverdisks a year ago, I don't think anyone at CU knew quite what we were letting ourselves in for. Ever since, we've had people writing in and asking us to covermount more unreleased games; Simon the Sorcerer 2, Magic Carpet, Frontier 2, Pizza Tycoon, Putty Squad...

Some of these games were never finished, others were but we happen to know that they were far too rubbish to be worth it. That eliminated most of the options, but one notable survivor of the process is System 3's Putty Squad – now soon to be released by Alive Media Soft. On a quest to rescue your fellow putties, you lead a flexible blob of Blu-Tac like goo around a multi layered four way scrolling environment with a range of foes, objects to pick up and drop, and environment puzzles. Armed only with a mean right hook and a body that can twist, stretch, float balloon-like around the screen and generally putty around, Putty Squad has all the hallmarks of being a true classic of the 2D platform genre.



▲ Putty Squad in AGA multi-colour overload.

There are no Tomb Raider style 3D realms, and it doesn't have the ultra smart modern sophistication of the Abe's Odyssey games, but this throwback to the heyday of bright cartoony platformers is certainly a welcome one to us if it is professional enough. Putty Squad has good looking AGA graphics and plenty of variation. From the demo we have played, it has the gameplay potential to be well worth adding to your game collection.

Playing Putty Squad is like taking a trip back to the early nineties, but unlike so many video game nostalgia trips, this one isn't looking set to be a letdown at all.

Putty Squad will be released for £14.99, probably in mid October. If you pre-order now, Alive Media Soft are offering it for £12.99. Contact them on +44(0)1623 467579, or email stevenalive@innotts.co.uk.

Don't waste your dreams!

After playing the latest demo of Vulcan's next commercial release for the Amiga, we can report that it's looking like quite a stunner. Designed for owners of CD-ROM drives and requiring only marginally more memory than an unexpanded A1200, Wasted Dreams thrusts you 60 years into the future and puts you in the place of a young military soldier turned space explorer by the name of Johanson. Finding himself thrown from an exploding space ship in an escape pod, only to crash land on the planet he was leaving just alittle while beforehand, not only is our hero incredibly calm and collected enough to write all of his thoughts down in a diary, but Agillera just happens to be populated with an ideal number of green-skinned alien beings to make Johanson's time on the planet as eventful as possible. Still, who'sgoing to argue with such convoluted plotlines when you can jump straight in and play the demo on this month's CD? After playing the demo here in the CU Amiga offices and mentioning a few things to Vulcan, they have assured us that any minor glitches will be looked into before the final release. It can get quite frustrating when, for example, you have to line yourself up properly with the enemy in order to shoot them whereas they seem to be able to get you in their sights with surprising regularity, even if they're not in a direct line with your character. The demo appears to be rather strict on the position of your character when trying to interact with other elements of the game, which can give the false impression that they're not important when you first come across them, and some of the situations you find yourself in can defy explanation, like the spikey balls which bounce down corridors, and take big chunks out of your body shield for no apparent reason. Wasted Dreams, being an amalgamation of Monkey Island style puzzles and Chaos Engine style gameplay, is as much about thinking ahead as it is about shooting whatever you come across. The final release will offer opportunities to recharge your body shields (unlike the demo), which means you should get to explore some of the beautifully hand-drawn scenery which looks incredibly varied, as you can see from some of the screenshots on these pages, and get to talk to, interact with and even shoot some of the quite realistic, rotoscoped characters. If the full game is as varied and as captivating as the screenshots we've seen, Wasted Dreams will certainly live up to its name and keep you awake at night.



▲ Wasted Dreams

LambdaC

More details have emerged about space war game Lambda. Development has continued apace and things are getting rather exciting. A whole bunch of features like hypertunnels, enemy AI and custom sound routines have been added, and an experimental 70fps PPC port has been made – although PPC support is still undecided. The Lambda team are now looking into the possibilities of using chromakeyed real actors along the lines of the PC hit Privateer 2.

One of the most exciting sounding aspects is the introduction of LambdaC, an internally compiled bytecode based scripting language, inspired by QuakeC. LambdaC is designed to allow complex scripting of in game functions for mission design. It will accept cut-scenes for linking or intro animations, and importing of replacement models for ships. We might just see someone producing a WipEout clone Lambda total conversion at some point! ■

Dave Stroud & Andrew Korn



Where now?

Screen Scene closes up shop now, but that shouldn't be taken to mean that there will be no more games to find out about. You'll find that there are other magazines that cater for your needs. Amiga Format will no doubt suit most of you, but our overseas readers will often find local equivalents such as Amazing, Informer, Info, Magazyn, Plus and so on.

You would also do very well to be on the Net if you aren't already. Amongst the many valuable resources on the Net are two excellent Amiga games 'zines, Amiga Flame (www.amigaflame.co.uk) and Amiga Nutta (www.nutts.demon.co.uk). Check them out, they are both great. There's also comp.sys.amiga.games amongst the Usenet newsgroups, a place for Amiga gamers to meet, discuss and ask for tips. See you there!

Sixth Sense Investigations

■ **Price: £29.99** ■ **Available from: Epic Marketinge © 01793 490988**

It's too early to start proclaiming a renaissance, but it is at least fair to say that graphical adventure games are starting to enjoy a bit more respect again these days.



With Big Red Adventure and now Sixth Sense Investigations, those who have just completed Monkey Island for the 30th time at least have a few more options. Sixth Sense was actually released some time ago on floppy (many of them), and is finally seeing a proper CD release complete with full speech, not to mention extensive hard drive savings.

In case you forgot

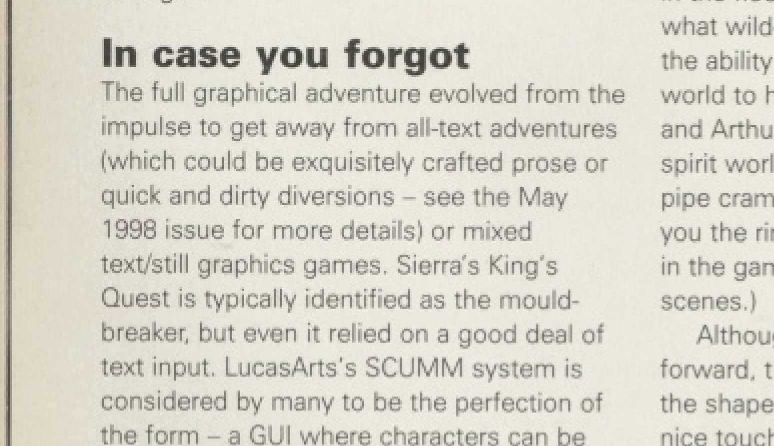
The full graphical adventure evolved from the impulse to get away from all-text adventures (which could be exquisitely crafted prose or quick and dirty diversions – see the May 1998 issue for more details) or mixed text/still graphics games. Sierra's King's Quest is typically identified as the mould-breaker, but even it relied on a good deal of text input. LucasArts's SCUMM system is considered by many to be the perfection of the form – a GUI where characters can be moved simply by clicking on a destination, where inventory management is easily done by scrolling around a list, and there is a small on-screen list of commands – usually very simple, "talk to", "use", "give", "examine" and so forth. Coincidence or not, SCUMM games also tended to be quite whimsical in tone.

Sixth Sense follows very closely in those footsteps. Further, it adopts the "no-kill" philosophy of some of the LucasArts games, most notably Day of the Tentacle. It is impossible to be "killed" or to hit a dead-end in the game. This can be a blessing and a curse – more on that later.

The idea of the game is innocent enough. Your character, Frank, is the proprietor of a small detective agency. Your staff consists of a pesky mouse that lives in the floorboards, Ben, a somewhat wild-looking individual with the ability to tap into the spirit world to help you solve cases, and Arthur, an inhabitant of said spirit world. But you've got the big pipe crammed in your face, so that makes you the ringleader of the ragtag group. (Later in the game you become Ben for certain scenes.)

Although the packaging is rather straightforward, the instruction manual is bound in the shape of a detective's notebook – a very nice touch. The typeface is rather small, unfortunately. Further, it's a very good idea to both read the manual and watch the game's intro closely. They provide very different sets of information about the game world, but understanding both is necessary, because very early on the game presumes you understand who is who and what history you have with them.

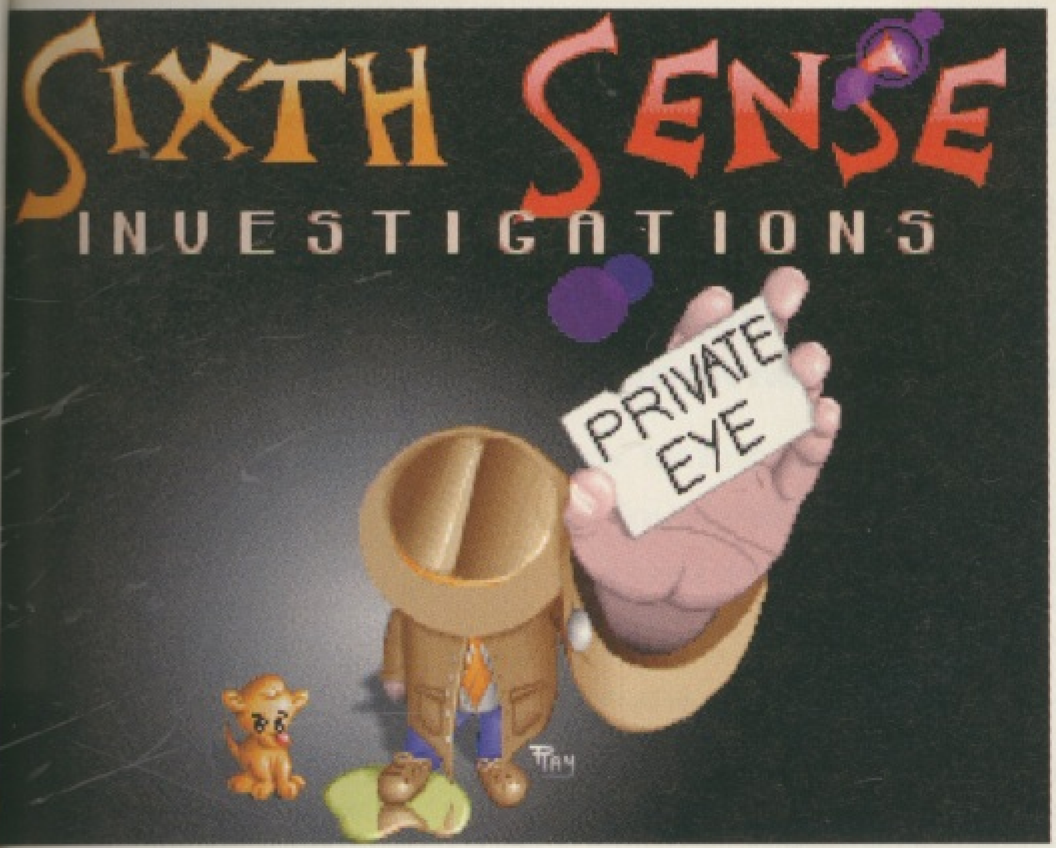
The CD edition of Sixth Sense adds high-quality digitized speech to virtually every bit of text encountered within the game. This replaces the normal text display of the floppy version. The talents unleashed on the world in this game won't be giving your favourite radio performers a run for their money any time soon – in general, the job they do is more or less adequate, although there are a few places where the actor didn't grasp the context of his line and so spoke it with the wrong emphasis, and other places where the speech gets a bit mumbly and you wish you'd turned the text display on. You can disable voices at any point during the game, but if you're in the middle of a long exposition there's nothing you can do but listen carefully. A "voice and text" option would have been nice. And then there's the inexplicable transformation that was done on Frank's voice – on the CD it is stored both in its original form, and in a slowed-down version to give him a deeper voice, but it's very obvious to the ear that is exactly what has been done, and it's very irritating. And Frank says a lot of irritating things, so it's only made worse.



◀ **That appears to be a 'Queem' poster on his bedroom wall. I don't think I want to know...**

A Difficult Assignment

By the developer's own admissions, Sixth Sense is quite difficult. They didn't want anyone to feel they hadn't gotten their money's worth – in fact, the authors claim that even with a walkthrough in hand, completing the game takes between 8-10 hours! The curve is fairly steep, though – most games, regardless of difficulty, present a few "warm-up" scenes to build comfort and confidence with the game world and the story, but Sixth Sense affords no such luxuries. (There's a locked door that can't immediately be opened in your own bedroom, for goodness sake!) There is certainly an epic adventure feel, however, especially when you are able to step beyond the bounds of the conventional world and head into one of the two more unusual realms – that of the robots or that of the cartoons. It's not very likely that if



◀ Is that a radiator knob on his head... or is he just pleased to see you?

you're the type who picks up a new game and plays through a weekend that you'll be done by Monday morning. It's still unfortunate that the "pre-game" wasn't a bit more forgiving, because it's nice to feel an early sense of accomplishment before being thrown into the story proper. For example – in Zak McCracken, LucasArts's second SCUMM game, the title character had to face such challenges as retrieving a cash card from under his desk and finding his remote control (under the sofa cushion, where else?) before tackling the larger issue of saving the world from alien mindbenders. I didn't feel I was treated to such a warmup, however...you walk out of your office with a few items in hand and are suddenly on the main game map where a half-dozen puzzles await you and it's not at all clear in which order you should try to solve them.

Sixth Sense's interface is about as straightforward as they come – nine commands, plus an implicit "walk to." By default, the pointer on-screen acts as a "walk to" indicator, but when placed over an object or person, it switches to the "most likely" action (push for a button, talk for a person, take for many other objects, etc.) In this way, the interface is something of a synthesis between the SCUMM and the Sierra interfaces. Most of the time the game, written in the new "Vega" system, works quite well, but there were a surprising number of locations that the main character doesn't walk to properly – taking a detour only to turn around again. This happens most noticably on the main map screen, a nice addition to a game like this one, where each location you can visit (in the early going, such places as a laboratory, a used car dealer and garage, a toy manufacturer, a cheese shop) are shown roughly to scale on a scrolling map that you can take Frank down.

I was pleasantly surprised with the quality of the graphics in Sixth Sense. While it's obviously derivative of the LucasArts style, Sixth Sense's artists had the good sense not to simply clone it wholesale. The art is pleasantly steeped in fantasy without being overly gaudy or distracting. (The comic proportions of Ben's slouch and Frank's pipe were a bit annoying, though.) If only the animation met the quality of the still images. Characters don't walk so much as glide through the game, and even then not always smoothly – such as when Ben sets off on his first assignment of the game in the early going.



Ja, Funny!

What would happen if a group of Germans and Italians got together, wrote an adventure game, and then had it translated into English? Why, Sixth Sense Investigations, of course! The now-famous Amiga Translator Organization (ATO) lent a Herculean hand to the conversion of Sixth Sense, but there are quite a few reminders that what you're hearing (or reading, if you can't take the voiceovers) probably didn't come from the pen of a native speaker.

Even the game's promotional materials have that "straight from the translation dictionary" feel – "The base storyboard tells of a crazy young guy who has the ability to communicate with the spirit of a sarcastic man." But hey, sometimes a hit is a hit no matter who wrote it first: "Heroic quests are waiting for the detectives, for example the investigation in a cheese storage."

The verdict on Sixth Sense is that, overall, it is a solid effort. The "no-kill" policy creates a serious problem that I don't think the game designers fully appreciated, however. In a game where one can make fatal or "no-win scenario" mistakes, it's possible to learn from those mistakes. ("Oops! The house blew up when I turned the lights on. I guess I'd better make sure the gas isn't stuck on before I do that next time.") In a game like Sixth Sense, however, that can't happen. One way to solve that problem would be, for example, to have the character say "I don't think I should turn the lights on – it smells like gas in here!" Unfortunately, in Sixth Sense there aren't many "I can't do that, but here's a clue" clues. Typically, the game just feeds you a stock "I can't/don't want to do that thing" line which is fantasti-



cally unhelpful. And despite the manual's fair warning that the game uses "a totally sick logic", it doesn't explain that said logic may not be very clear to you even after you stumble on the right solution. For example, if I tell you that you can put the piggy bank but not the tennis ball into the barrel of acid, could you tell me why? I can't tell you why either. And it doesn't multitask very well – boo, hiss!

An unlimited load/save capability rounds off the package. The flaws in Sixth Sense are there, but they don't stop it from being a pleasant, even rewarding game once you get into a rhythm. The CD version represents superior value if for no other reason than convenience – my guess is that you won't want to leave the speech on full-time. ■

Jason Compton

Sixth Sense Investigations

■ Processor .... 020, AGA	Graphics 84%
■ Disks .... CD	Sound 86%
■ RAM .....2Mb (4 for speech)	Lastability 89%
■ HD .... Required	Playability 75%

OVERALL

Uneven at times but still a worthy submission to the world of adventure gaming.

83%

X-Men: Ravages of the Apocalypse

■ Price: £18.99 ■ Developer: Zero Gravity ■ Available from: Alive Media Soft ✆ 01623 467579

Marvel Comics' famous mutants make it to your Amiga, by way of this commercial Quake conversion.

It might seem obvious for an X-Men licensed Quake conversion to let the player play as an X-Man, but would be a bit of a waste of the licence fee if you never actually saw the licensed characters short of looking in a mirror. Instead, Zero Gravity have come up with an appropriately convoluted plot about a pair of supervillains who are planning on taking over the world with an army of X-Clones. This gives you the opportunity to fight famous X-Men characters and gets all those licensed images on screen as often as possible. The plot seems like nonsense to me, but then X-Men is not my type of comic strip and I concede that Cerebus the Aardvark might be less appropriate for a Quake total conversion.

X-Men: Ravages of the Apocalypse is graphically well put together, and manages without too many hefty textures, keeping the speed up. Weapons are all upgraded and look pretty nice, and the character graphics are impressive. Level design does not keep up to these standards, alas. Although professionally done, they are with a few exceptions rather uninspiring, with little of the clever constructional trickery which marks a really good Quake game.

The biggest problem most people will have with X-Men is that it is damn hard. Even the weakest x-clone is likely to take a couple of hits from your best weapon, and their superpowers can make them really tough work. Storm can summon up winds to blow you around the place, Iceman can temporarily freeze you, and Wolverine keeps getting up after you thought you'd killed him. If you aren't conversant with circle strafing or, heaven forbid, use keyboard only (some people do) just forget about this game, you'll be dead before you know what's happening.

On the PC, a custom launcher is used to configure the Quake engine properly to cope with the multi-player section. This allows you to pit X-Men against each other, using their superpowers. This is much the best thing about this game, but unfortunately without an Amiga version of the custom launcher, you can't chose your character. Zero Gravity told us they love the idea of X-Men on the Amiga and will be sending Alive the codes to make multi-player work, so expect an Amiga launcher for this soon.



▶ Go on, shoot down those X-clone scum...

I'm not hugely impressed with X-Men: Ravages of the Apocalypse. It's definitely not rubbish, and if you are an X-Men fan you are certain to appreciate it, but for most people, until multi-player is working the CU Superstar winning Time of Reckoning disk bundled as a launcher will actually be a lot more fun. ■

Andrew Korn

82%

Quake: Resurrection pack

■ Price £25 (£50 with Quake)

■ Available from: Alive Media Soft. ✆ 01623 467579

AMIGA SUPERSTAR

Getting bored of Quake? The Resurrection Pack aims to bring it back to life.

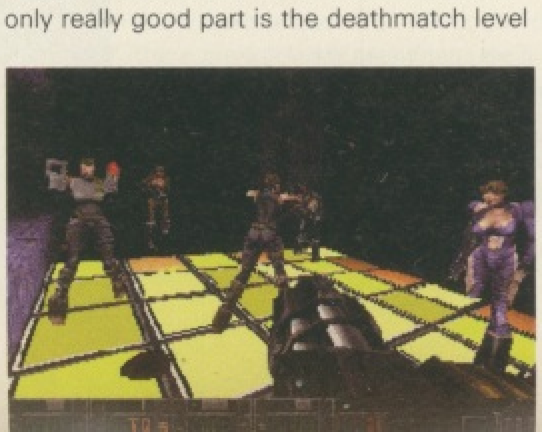
Here's the deal. Twenty five quid and you get Time of Reckoning, Q-Zone and Malice. Another twenty five and the game's yours too. Q-Zone and Malice are Quake total conversions, while Time of Reckoning - bundled to make launching them easier - is a collection of Quake add-ons with an easy front end.

Malice we reviewed in the June issue at £15, and it got a Superstar. Time of Reckoning got a Superstar last issue at a tenner. I'd say any Quake owner ought to get both, meaning Q-Zone comes for free, fortunate given that it is the worst of the bunch.

I won't go into detail with the two I have already reviewed, but to recap: Malice is Quake plus, with external views, vehicles, superb design, lovely graphics and a narrative with cut scenes – probably the best game on the Amiga. Time of Reckoning is a collection of vast scope which makes games of Quake enormously variable. Q-Zone is a much more Quake like conversion than Malice, the only obvious difference being four new monsters and a new weapon which fires ninja stars. Level graphics are often ugly and design is all over the place, with signs of rushed work (texture peeling) in places. Probably the weakest commercial add on I've played, certainly less interesting than PainKeep, a shareware conversion included in Time of Reckoning. The only really good part is the deathmatch level set in a jumbo jet!



▶ An airline where the aisles are wide enough to walk down? It would only happen in a computer game!



◀ Things get a bit lairy down the local disco in Malice...

Thanks to Malice and Time of Reckoning, the resurrection pack certainly does what it sets out to do. If you haven't got Quake yet, £50 with those two bundled should not be missed. If you do, you can think of this as Q-Zone for free when you buy Malice and Time of Reckoning. Either way, a recommended purchase. ■

Andrew Korn

93%

Tips Central

Firstly I'd like to thank CU for letting me be part of the crew, you've done a fantastic job and I hope to see you all involved with the Amiga in the future – 'We need dedicated people like you!' Now for the last solutions, this side of the millenium anyway.

Sixth Sense Investigations

I've gotten as far as Toons City, but now I suddenly have no idea on what to do, Please help!

Phil McCracken, Belfast

I'll try to give you a hard push then. Go as far to the right as you can on the screen with the statue. Use the doorbell, and a speaker on the statue should start making sounds. Answer all the questions any way you want, and just cry like a baby until they let you in. Now talk to Mr Peanuts until you have nothing more to talk about. Grab the spraycan and the bottle before you leave for Glen's store (It's the only one that's open).

Spray the only pair he has on display before you steal his account book and the newspaper. Give the book to the policeman hiding in the shadow of the statue. Next you have to free the guy stuck in prison. To do it you have to go back and forth between the staff talking, until the guard falls asleep. Now use the scissors on the desk to get the keys for the cell door. Free the guy and go to the bank. Then you have to head back to prison and pick up the clock on the wall. You might grab the glue on the desk while you're back there, as you'll need it soon. Back outside the bank you'll meet the fugitive, and BANG! As a last hint I'll say there's an envelope in the mailbox, and some sticky fingers might help you grab it.

Ultima IV

I've found seven pieces of the missing map but now I'm stuck on level two of Dungeon Wrong unable to get any further! Please aid me in my quest.

Joe Maplin, Cleethorpes

The map piece can be found in Dungeon Wrong. Try going to level three where you'll find the Hydra's Chamber, and in it a secret door hiding what you seek.

Curse of Enchantia

I can't get past the part where the sand monsters come up from the ground. Please help!

Gill Bates, Derby

You need a wire my friend. You'll find it by following this procedure: Go to the cave with four holes in the wall. Look into the holes and something should pop out. Now look into the far right hole and you should see some twigs. Use it with the seaweed I hope you already have in your inventory, and you've made yourself a mask.

Go to the 'Computer Cave' and look into the hole in the wall. There's what you need. Now take the computer and head for the cave with the plank. Stand behind the plank and throw the computer. Enjoy the ride and pick up the magnet when you land. Back in the cave that used to be the one with the computer, use the string with the magnet, and throw it onto the hole. You now have what you need.



Sixth Sense Investigations

Quest for Glory – Hero's Quest

I can't get in to see the baron. The guards tell me "you need the barons permission". I've selected my character to be a fighter. Please help.

Stan Dingsby, Hereford

The baron doesn't see just anybody. You'll need to prove that you're interested in his welfare. If you ask the guards about the baron and all his problems they might eventually realise that you might be able to help him solve some of them. Ask about the baron, his son, his daugther, Yorick, Babayaga, and about brigands. Now you should get it:)

Simon the Sorcerer

How do I get into Golum's cave by the waterfall? He just keeps saying "My Mum always told me not to party with strangers"!

Roger Bannister, Melton Mowbray

Well.. this is a tricky one. It's more than tricky actually. It's impossible! You're not supposed to get in. What you can do is give the Golum a nice jar of Swampling's Stew. He'll give you his fishing rod in return, so why don't you try your luck fishing?

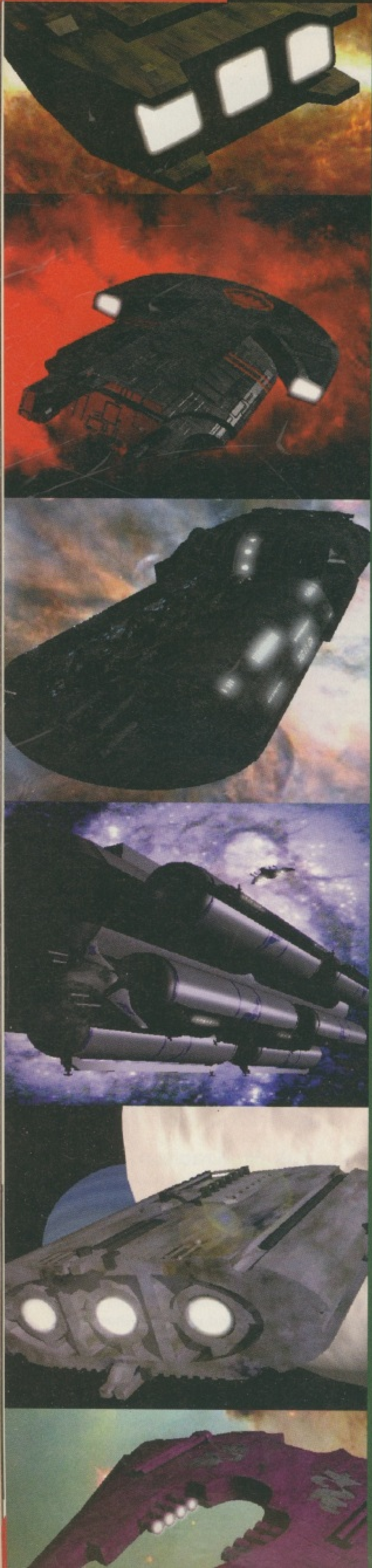
Zak McKracken

I have the blue crystal and the crystal shard, but how do I get my hands on the crystal in Mexico? Also, what do I do in Stonehenge?

Ben Doon, Perth

In Mexico find your way through the maze to the map room, were you'll find the crystal. Now use the yellow crayon on the strange marking, and draw the symbol from the huge statue on Mars. At stonehenge try using the blue crystal on the altar stone.


Simon the Sorcerer



Founding Worlds Explorer 2260 diar

PAR 4

From the start, designing Explorer's look has been a unique challenge. With a huge game universe, its visuals couldn't feel mundane... graphics artist Rob Asumendi takes you through the pitfalls and surprises of bringing it to life.

Few projects are more rewarding or frustrating than designing the future. Theoretically, there are no limitations to what goes – creating aliens, spaceships, and intergalactic delicacies makes for much more artistic freedom than you'd get working on, say, a racing game. Since aerodynamics don't apply in space, a ship may be any shape. Alien aesthetics throw the door open for an even wider range of design possibilities, but in practice, the audience's imagination throws a wrench in the works.

A spaceship needs to look like a spaceship. Feedback on one early fighter design explains: "It's not a spaceship, it's an egg carton with wings!" TV shows like Star Trek: The Next Generation and Babylon 5 have opened many minds to very different designs (the Vorlons with their organic spaceships, space inhabiting creatures, etc) but a large portion of the creative possibilities remain unseen. This is something The World Foundry wants to remedy with Explorer. On the other hand, if a design looks too much like what the people have already seen, they say, 'Hey, you've just ripped off Star Wars!' With every new blockbuster film, it gets harder to create an original design. Explorer's graphics artists must compete with the professionals behind television shows and video games, producing ships that are at least reasonably familiar yet unique. Because of the inevitable comparisons to Frontier: Elite 2 duplicating one of those ships, for example, is unthinkable.

The guiding concern for our spaceships remains functionality. Expect to see many 'useful' designs and details. Each ship must have an airlock, docking clamps, landing gear, weapons mounts, power systems, and some cargo space. Some races, like the Mogensen, build more artsy forms, but we humans will spend billions on design efficiency to save pennies on production costs. In other words, just like now!

Anthropomorphic Aliens?

Aliens must also look familiar – of course there's no telling what strange and bizarre things could be out there... as you read this,



▲ Rob Asumendi's first attempt at 3D modelling.

evolution may be creating an intelligent creature that looks like a car seat with 6 1/2 table legs attached. Alas Explorer's critics would interpret this creature as just a poor render; they just expect humanoid or animal forms. Some of our races are a deviation from the norm though; the Sar'Den and the Rahn for instance.

The original plans for constructing Explorer's aliens misfired when SETI (the US based Search for Extra Terrestrial Intelligence project) told us that they actually had no photographs of extra terrestrials. Plan B was initiated – I would have to design them myself. How to do it?

To begin with, only the Ovaskans had a required look – large and insectoid – which meant lots of collaboration with Chris. Countless sketches had to be made of such a foreign creature, from almost every angle. A good place to find ideas was the Internet... microscopic images of dust mites and other tiny, ferocious creatures provided the inspiration for features like the spikes, hands, and face. Final sketches then were drawn to scale in all three critical positions (top, front, and side). About a Lightwave week later, Explorer's first creature made its way to the

Encyclopaedia Galactica. Listening to Moby's "Animal Rights" album always brings back memories of modelling the Ovaskan, as I heard it for the first time during those long, long hours.

After that, the game just kept getting trickier. Some alien faces were much more ambitious than the effective but simplistic Ovaskan. Subtle models called for such techniques as spline patching, metaformations, NURBS and using a much faster machine! So, it was time to diversify – and to turn off the computer.

Extra-Terracottas

There's no telling what a thorough search of a cluttered room will turn up. As it happens, mine turned up a block of unused modelling clay and a cheap plastic cup. The clay was really fun stuff, and the cup had a curvature perfect for sculpting a face over. In about three hours, the first Mogensen was a physical entity. He had no body, or back to his skull, but the results were encouraging. A short lifetime of acrylic painting suddenly proved its value, as the model transfigured from a sterile shape to living colour. From this point, the model was digitised and touched up in ImageFX (*the* graphics tool of choice, barring none) for dramatic effect. It goes to show that, attached to them as we may be, our computers are just tools like a paintbrush or a chisel. An artist should always take their respective advantages and disadvantages into account when choosing the right one for the job.

Becoming a Video Game Artist

What are the Risks?

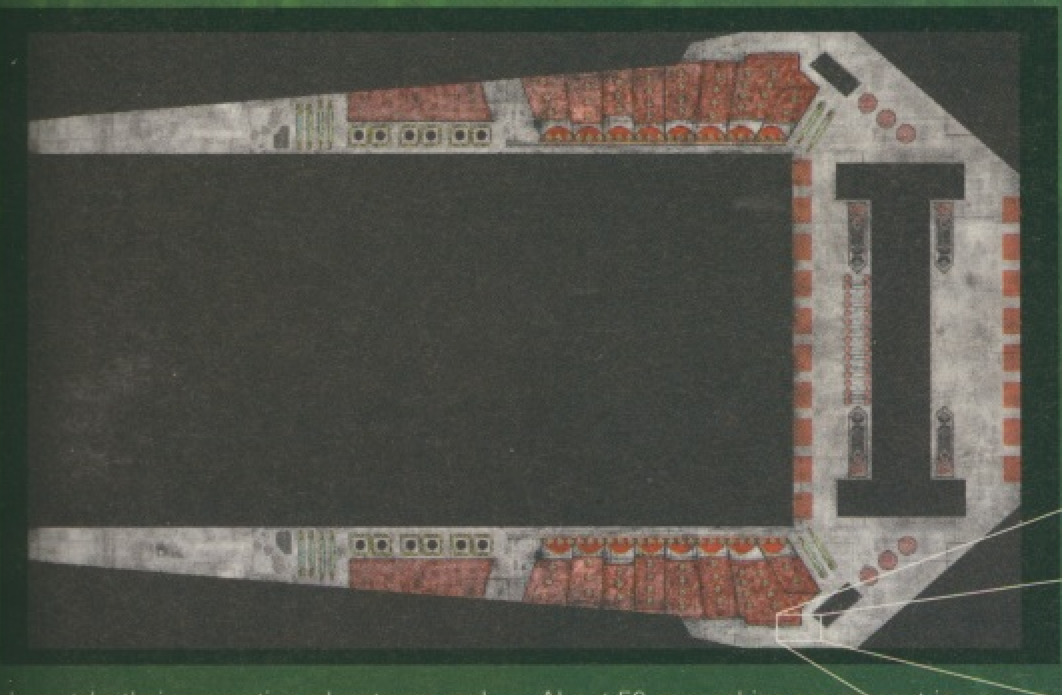
Well, there are quite a few. The style of the game may not be right for you, the team may fold before the game's complete, you will lose several hours of free/sleep time per week (I spend over a dozen on average with Explorer), you may not find a publisher, or at least a good one, and thus might not get paid, and you must constantly monitor the state of the market. Any of these things may leave you and your artwork out in the cold. The best precaution to take is to research teams thoroughly before committing. Make sure it's a game you're enthusiastic enough about. If a group has a mailing list, join it. That's the best way to find out who they are. Remember, good graphics artists are few and far between. Every aspiring coder will want you, but make sure you want them.

Do I have to know 3D?

This is something I definitely wondered about before joining the Explorer team, as its relevance in the video game market has become ever more apparent. The answer might surprise you though, because it's 'No'. A good basis in 2D is all you need to get started on video games. 3D can be learned in a couple months – my first spaceship (pictured here) is proof. This image was created shortly before my joining the team in May '97. Prior to that, I had only used 3D software for logos, but my 2D training dates back to pre-school. Don't be afraid if you don't know the difference between inverted non-planar polygons and Boolean subtraction macros... if you can draw, you'll be a very useful addition to any development team – just as long as you are willing to learn.

So, should I really join?

If you love doing your artwork, and have considered the idea long enough to ask the question, then yes. Helping to make a video game will refine your talents (and probably uncover new ones), create real goals, give an enormous sense of completion when those goals are realised, and develop collaboration skills – certainly Explorer 2260 has been a collaboration like no other project I've worked on. It can give a younger person a sense of direction towards their career, or allow an older person to finally pursue a lifelong interest. Both will make new friends. A great opportunity in your life could be an email away!





▲ Extreme detail is the name of the game when it comes to Explorer's textures. This one weighs in at 15MB.

And Finally, the Introduction...

Only one person knows much of anything about the intro movie to Explorer. That situation shall remain unchanged until musician Ruben Monteiro produces the accompanying music, and for good cause. With hundreds of hours spent modelling, texturing, lighting, moving, and producing effects, the last thing an intro should be is old hat! So, while no screenshots will be published, here are a few technical specs. Each frame is rendered at a resolution of 376 X 240 in 24 bit colour. About 50 spaceships are present in any given scene, some containing quite a few more. Add to that half a gigabyte of texture maps, some of which weigh in at 15MB each. Many of these will make their way into the game engine thanks to its advanced texturing features. To date, 1500 frames have been rendered out of an estimated 2000. The final product may be downscaled to ham8, but early tests are indistinguishable from true colour. Expect action, comedy, drama, bravery, sacrifice, and romance! Well, maybe not so much romance, save that for the next game....

Producing such a large animation really demonstrates the Amiga's need for new processors like PowerPC. Some frames take an '060/50 well over an hour to render, making testing and 'quick' checks a laborious process. It's easy to eat up an entire week when rendering, but thankfully, the Amiga still multitasks well enough to work on different aspects of the game during that time. From a developer's standpoint, the new Amigas are incredibly exciting for this very reason – I for one, hope that development information is made available soon.

This is the final part of the E2260 Diary because of CU Amiga's closure after this issue. All of us in World Foundry are deeply saddened at this being the end of the road for the magazine but would like to thank Tony, Andrew, Neil and the rest of the staff for giving us the wonderful opportunity to share with the readers the development of our game and giving it a distinctive appearance. We will ofcourse share any news of E2260's development with the last big Amiga magazine Amiga Format. Goodbye, old friend. ■

Rob Asumendi and The World Foundry

We're saying goodbye, but not before giving you the long awaited low-down on two of the most eagerly awaited products; NetConnect 2 and The Atéo Tower.

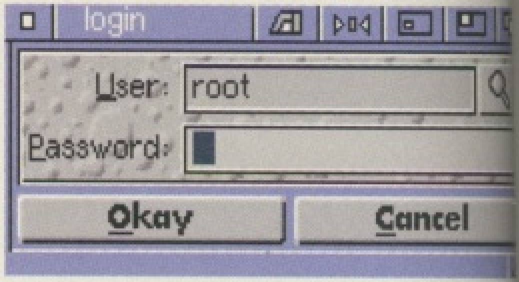
TechScene

NetConnect 2

■ Price: £59.95 ■ Available: Active
✆ 01325 460116

AMIGA SUPERSTAR

Connecting to the Net has never been easier. David Stroud takes apart the software bundle that Active Technology have only just put together.



▲ When using multiple accounts, Genesis needs to know who yo… are before it lets you in for a look around.

Three or four years ago, a package like NetConnect 2 would have been hailed as some kind of mysterious fruit from the Gods (Net God himself, perhaps?) But then, three or four years ago, netizens were the equivalent of Stoneage Man - banging stones and rubbing sticks together just to make a fire.

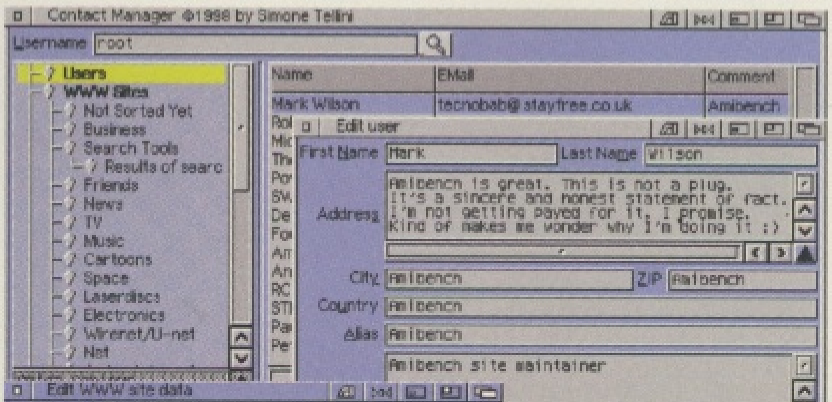
NetConnect 2 is an integrated suite of Internet software, covering a range of Internet services - Email, News, FTP, IRC, Telnet, the World Wide Web - all in one fell swoop. NetConnect 2 is to the average netizen what a Zippo lighter would have been to Stoneage Man: Powerful and versatile, yet easy to use.

The provided script makes installation a breeze, and allows you to choose which elements and programs you would like copied to your hard drive. Installing the complete package is the best option, even for those who are already 'netted up and familiar with other programs, because you never know – you might just like the integration that NetConnect 2 has to offer.

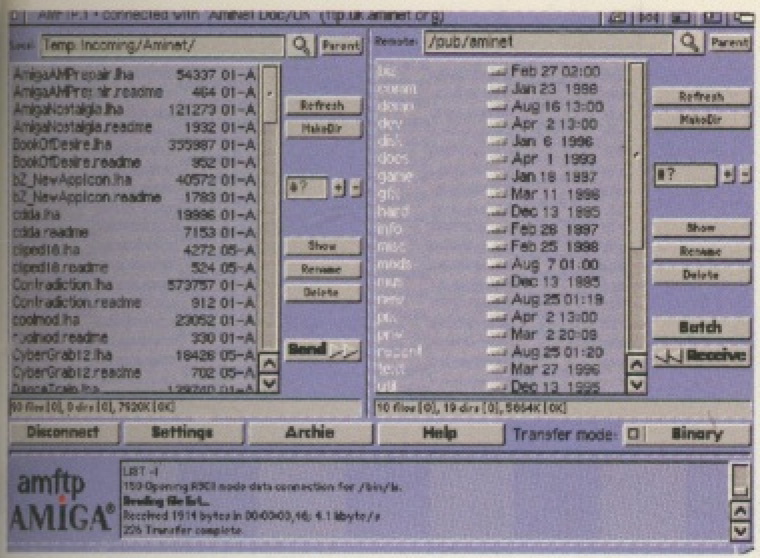
In the beginning...

Genesis, the underlying TCP (Transfer Control Protocol) stack used to get you connected to the 'net, is a breath of fresh air compared to older versions of AmiTCP. The comprehensive Prefs program will be of particular interest to experienced users, who may wish to tweak their Internet connection, set up a LAN (Local Area Network), create multiple accounts with separate passwords and configurations, or add a few bells and whistles to their default setup.

If more than one person uses your Amiga for connecting to the Internet, you'll be dancing in the streets after using the multiple accounts feature of Genesis. Rather than forcing everyone to use the same setup, sift through the same list of websites, IRC servers and email addresses or even use the same ISP, setting up separate accounts for each user with different passwords will allow each user to use their own ISP and keep all their contact information in the Contact Manager separate from everyone else's. For the inexperienced netizen, or even the experienced one who wants to see how easy it is to get connected these days (so they can argue that it was so much better when you had to do everything by hand, even though deep down they know it's not true), the Genesis Wizard is the business.



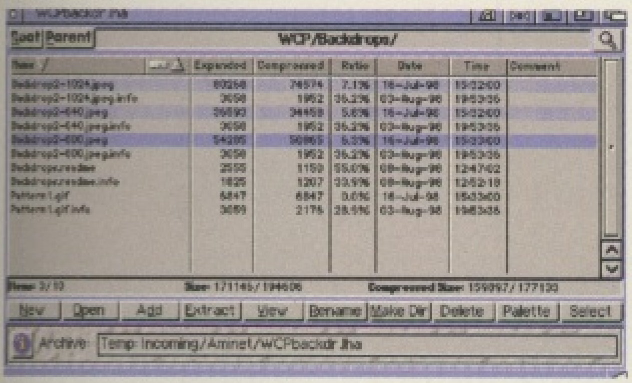
▲ The hub of the NetConnect 2 package, the Contact Manager, does a sterling job keeping track of all your names, addresses, phone numbers, web addresses, IRC servers...



▲ For downloading all manner of files, AmFTP does the job.

When loaded, all you need to do is tell the Wizard a few basic details like how to find your modem, the phone number(s) of your provider, your login name and password, and whether or not it will need to use a login script to connect to your ISP. If you're still under the impression that getting connected to the Internet these days is a tricky, time-consuming business, read the "Step by Step" boxout.

Once you've configured your setup with the Wizard, loading Genesis itself will let you



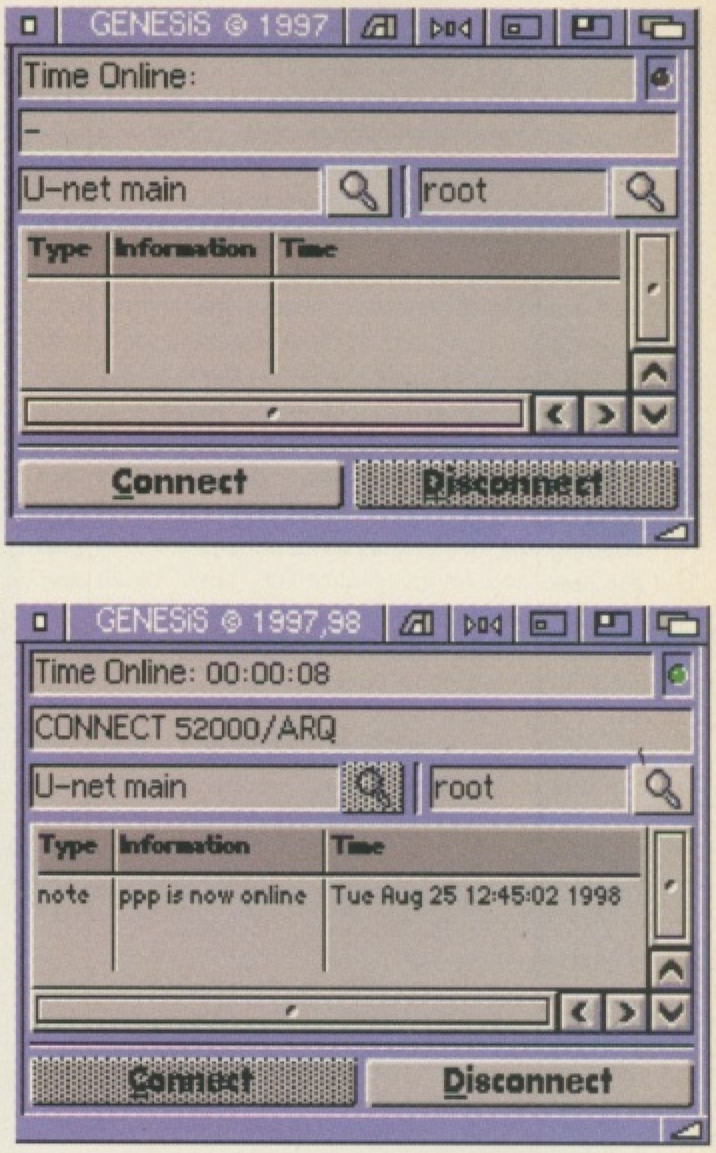
▲ X-Arc makes dealing with archives a piece of cake.

connect to the Internet for your first online session, simply by clicking the "Connect" button. Once you're connected, Genesis will report the connection speed, tell you how long you've been online and show you a little more information like the setup you're using and the account you're logged in under. This window is configurable, so you can show as little or as much information as you like.

Keeping in Contact

To help you fully experience the wonders of the Internet, NetConnect 2 provides you with a big bundle of software which should leave you wanting for little more than free local calls from your phone company. In all, there are ten applications included on the CD (11 if you count Genesis)... AmFTP, AmTelnet, AmTerm, AmIRC, Microdot-II, Voyager, NetInfo, AmTalk, XArc and the Contact Manager. In other words, you should be kept busy for a few months. The Contact Manager provides an ideal hub around which the other applications can operate. Voyager, for example, can save its hotlist to the Contact Manager, Microdot-II can use the information contained within Contact Manager's database for emailing purposes, and so on. As it recognises the multiple accounts offered by Genesis, it's possible to keep your names and addresses separate from those of any other user. On loading, a requester asks you for your username and password, to make sure you're accessing your database of information and no-one else's.

The level of integration between the separate programs provided by the Contact Manager certainly makes keeping tabs on all of your information easy, because you only have to look in one place. What's more, you can import existing data from all sorts of programs that you might have already built up an extensive list of addresses in: Voyager, IBrowse, AWeb, AmFTP, Dopus, Thor, YAM, Microdot-II, STFax and AmIRC are already supported. This feature alone is a life-saver, as it saves you having to type everything in all over again – an unenviable task, even if you only have one web site in your IBrowse hotlist or one server configured in AmIRC.



▲ Before and after the moment of connection – the Genesis GUI is both informative and highly configurable.

Manage your contacts

Of course, you'll have to be careful that you don't leave this information available to other users after you've imported it into the Contact Manager: It would be all too easy to forget about that IBrowse hotlist and leave it lying around for other users to import the very same information. Perhaps an option to delete or encrypt the old data files should be included in a future release (remember that deleting a file doesn't get rid of it completely, as anyone who's ever had to recover an important file will understand).

As well as protecting information, it would perhaps be an idea to allow one user to send information across to another user's database, so that sharing information doesn't require each user to enter the information separately. That aside, the Contact Manager provides an essential part of the NetConnect 2 package. You could

MIME

MIME (Multi-purpose Internet Mail Extensions) is a set of standards used when exchanging various types of media over the Internet. Attachments to an email, files downloaded from an FTP site or transferred over IRC - they all need identifying by the computer they end up on before they can be used.

By using MIME, a picture viewer can be loaded to display files ending with ".GIF", ".JPG" or ".IFF". Files which end with ".LHA", ".LZX" or ".ZIP" can be passed to X-Arc for unarchiving - the list is almost endless and, as you might expect, highly configurable, allowing you to use the programs you have on your system for dealing with the files you receive via the 'net, and add your own definitions if there isn't already one to suit your needs.

The NetConnect 2 package comes with versions of aMiPEG, CyberAVI, CyberQT and Songplayer for dealing with Mpeg, AVI, Quicktime and audio files respectively, and plenty of other tools are available from Aminet, so with a little effort on your part, you should be able to deal with pretty much any file that's thrown your way, all thanks to MIME.

If you want to read about MIME in more detail, try the MIME FAQ, available from: http://www.cis.ohio state.edu/text /faq/usenet/mail/mime-faq/top.html

sit for days at a time, entering information into its numerous fields, rearranging groups and subgroups, experimenting with sending and receiving information to and from other applications... but you've got to stop somewhere and look at all those other programs.

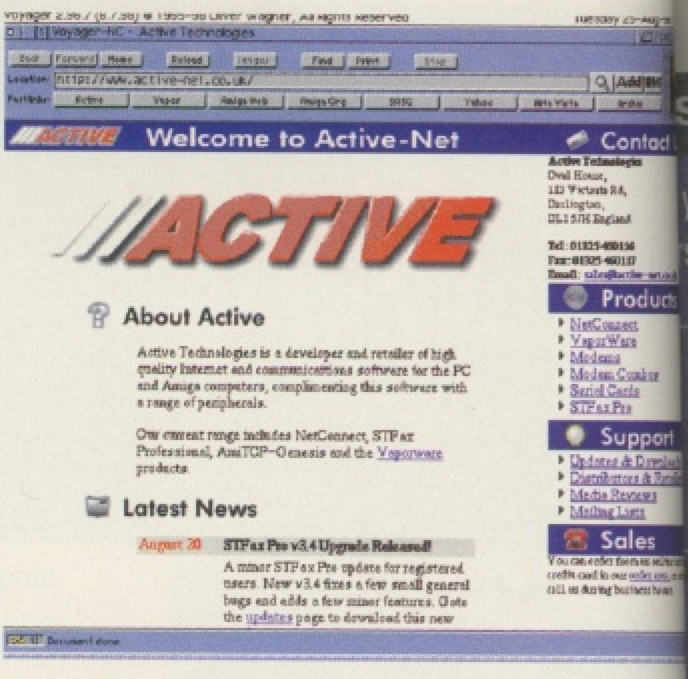
The MIME prefs program is another key part of the NetConnect 2 package which keeps a list of all sorts of filetypes, and actions that can be performed on them. Although on its own it doesn't sound that interesting, coupled with other applications it springs into life, showing any DCC'ed file using the configured tool, without needing any further intervention from the user.

Furthermore, setting up your MIME types in Voyager means that AmIRC, AmFTP and XArc will recognise and use them, without the need to make the changes in each individual application.

Integration Fascination

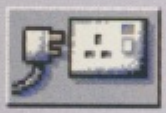
NetConnect 2 is all about integration. That's why it's bundled together at such a bargain price, and that's why anyone who buys it should install everything to their hard drive at least once. Alright, so there are a few glitches with the software, and setting everything up in a hurry is inevitably going to cause the odd crash when you least expect it, but if you take it one step at a time and save the changes you make as you go along, you'll soon have the hang of all this surfing malarky. Add to that a few extra resources (a nippy processor, plenty of RAM and a graphics card providing you with some nice large screens) and you'll be laughing all the way to your online bank.

However, with the level of integration that the NetConnect 2 suite of programs offers, it's a shame that it falls short in some areas. AmFTP may be good, but it's not as great as



▲ Voyager NG in full flight.

Individual Programs



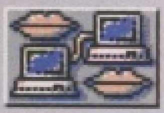
AmiTCP Genesis

- TCP (Transmission Control Protocol) is the common standard used by all computers to communicate over the Internet. Genesis is the latest version of AmiTCP which offers a high degree of configurability and supports multiple accounts.



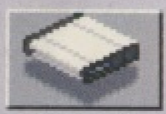
Microdot-II

- On- or off-line email and news reader.



AmIRC

- Internet Relay Chat client, considered by many to be the best on any platform.



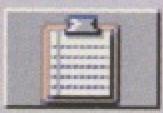
AmTerm

- A terminal emulator. Useful for connecting directly to another computer system, such as a Bulletin Board System (BBS).



NetInfo

- Provides information on miscellaneous Internet services like Lookup, finger, whois, traceroute and ping. You may never use it, but it's nice to know it's there.



Contact Manager

- An integral part of the Netconnect 2 package, Contact Manager provides centralized access to Email, FTP and Web site addresses, IRC servers and all manner of other useful information.



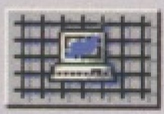
Voyager-NG

- The latest version (2.96.7) of the Web browser Voyager.



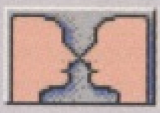
AmFTP

- For downloading plenty of files, or maintaining a website, you'll probably be using AmFTP.



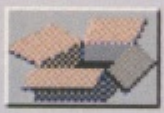
AmTelnet

- Another program with minority appeal, AmTelnet will allow you to log on to and work on a remote machine. If you have an account with a university, for example, you could use telnet to log in and check your mail. Or you could just use it to play MUDs :)



AmTalk

- Allows two users to talk to each other in real time. A precursor to IRC, and will therefore be little used. But again, nice to know it's there if you ever need it.



X-Arc

- Downloading files from the Internet, you'll inevitably have to deal with lots of archives. LHA, LZX and ZIP files - they'll all need unarchiving, and X-Arc handles the job brilliantly.



Dock

- The Netconnect 2 dock is a configurable toolbar (not restricted to the NetConnect suite of applications) that sits on a public screen and will launch any program at the click of a button or the press of a hotkey.



MUI 3.8

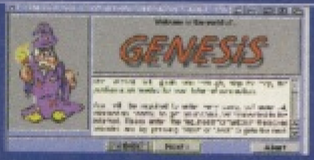
- An unregistered version of MUI, used by all the Netconnect 2 programs, is provided on the CD and is the only part of the package which needs registering for unrestricted use. Whilst some people may want to avoid it like the plague, without MUI, NetConnect 2 would lose all of its configurability and integration.

Step by Step

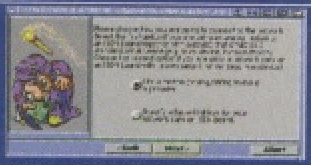
you're still a little concerned about how to actually get your Amiga connected to the internet in the first place, fear not. With NetConnect 2, it's this easy:

Install the NetConnect 2 software to your hard drive, and reboot so that the necessary assigns take effect. From the Netconnect drawer on your hard drive, open the "AmiTCP" drawer and double-click the "GenesisWizard" icon.

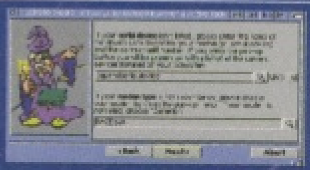
Read the text contained in the first window which appears. Turn your modem on, click the "next" button.



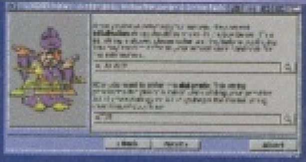
The second page presents you with a choice of using a modem or a network card - you shouldn't need to alter the default option, so just click "next".



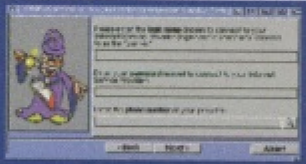
Select the serial device your modem is connected to ("serial.device" if using the Amiga's internal serial port, or "squirrelserial.device" if you're using a Squirrel PCMCIA interface). The unit setting should be left on "0". Next, choose your modem type as described, leaving it set to "Generic" if your modem isn't listed.



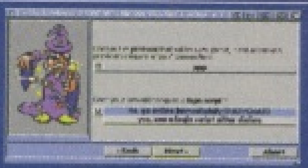
The "initialisation string" on the following page shouldn't need changing. If you need to enter a string yourself, "ATF" should be sufficient (consult the manual which came with your modem if you aren't sure). On the same page, enter the dial prefix. Either "ATDT" (for tone dialling) or "ATDP" (pulse dialling).



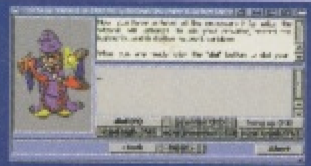
Next, you will be asked for three details relating to your Internet Service Provider: The name you use to login, your password, and the phone number. You should have received this information from your service provider when you subscribed.



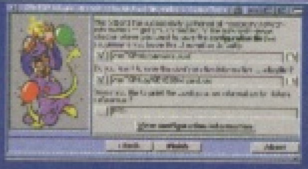
The "protocol" setting on the following page shouldn't need altering, as most ISPs now support PPP ("Point-to-Point Protocol"). Your ISP will be able to tell you if they support the PAP/CHAP login procedure. Otherwise, you'll need to select the "login script" option.



The login script itself is recorded from this page, which gives you a description of the available buttons and lets you control the login process. Should you need to, you can type directly into the text box to provide any other information.



After you have successfully logged on to your ISP, the Genesis Wizard will gather some further information directly, disconnect and bring up the final window, which allows you to view the configuration it has set up, print it, or just save it for future use. You're now ready to connect to the Internet.



it was. You can't upload a directory to a remote site, for example - instead, you need to create the directory first and copy all of the files across afterwards. When you've used software like Dopus Magellan, which can treat FTP sites just like any other directory, or FTPMount, which allows you to mount a remote FTP site as part of your system, having to load AmFTP separately from the rest of the NetConnect 2 programs just to get access to a remote file server does seem like overkill. Much better would be the possibility of clicking on an "ftp://" link to bring up an icon on your Workbench screen for the remote site, and add it to the list of available volumes in file requesters.

Get connected too

Having said that, for under 60 pounds you really can't go wrong. The full-colour, multi-page CD inlay provides what information you need to get started (although all you really need to do is pop the CD in your drive) and the online documentation provided on the CD is both thorough, clearly written and well illustrated, covering not only the basics of each package but more advanced topics such as a step-by-step guide to setting up a Local Area Network (LAN) with Genesis – interesting reading even if you're never likely to try.

Getting connected to the Internet has never been easier or more important to the Amiga's future. The Amiga community has gone online, providing those who are connected with everything they need. By sharing information with others, Amiga users are ensuring we have a future. PC owners may outnumber us, Amiga magazines may fold, but the online Amiga community remains as bouyant as ever. Buy NetConnect 2, get yourself a modem and join the rest of us online. I promise you won't regret it. ■

Dave Stroud

NetConnect 2

System requirements: 68020+, CDRom drive, Hard drive, Internet account.

Ease of use 96%
Install it. Configure it. Use it. Refer to the documentation every now and again if necessary.

Performance 92%
Take the integration a step further, and you'll have to prise the CD from my cold dead fingers.

Value for money 95%
Doesn't offer a great deal in terms of useful features.

OVERALL
If you aren't on the 'net already, and you aren't on the phone ordering your copy right now, you're mad.

94%

NewsRog

AMIGA MAGAZINE SUPERSTAR

■ Price: £40.00 ■ Supplier: Questar Productions http://www.questarproductions.com

News reader programmers face a dilemma, either make it easy to use and limit the number of features, or build a powerful program that is more complex to get started.

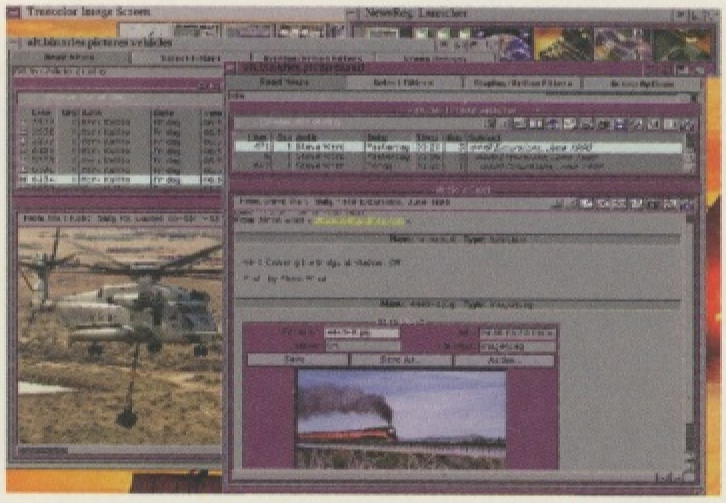
Now there is a brand new news reader that attempts to give the best of both worlds. NewsRog boasts a comprehensive specification, especially for a new program, yet claims to be more user-friendly than most.

First impressions were good, the program installed without a hitch, including some comprehensive documentation in HTML. The documentation is excellent, providing a good introduction to usenet and a series of tutorials on setting up and using NewsRog.

Unlike many programs, you cannot start to use a news reader until you have set up a basic configuration. This was pretty simple with NewsRog and fully documented in the tutorials. Once you are online and subscribed to some newsgroups, you can choose to download either complete articles for offline reading, or just get the headers for a group before selecting articles to download or read. The integration of online and offline use is very good; you can use both methods in a single session without any change of configuration.

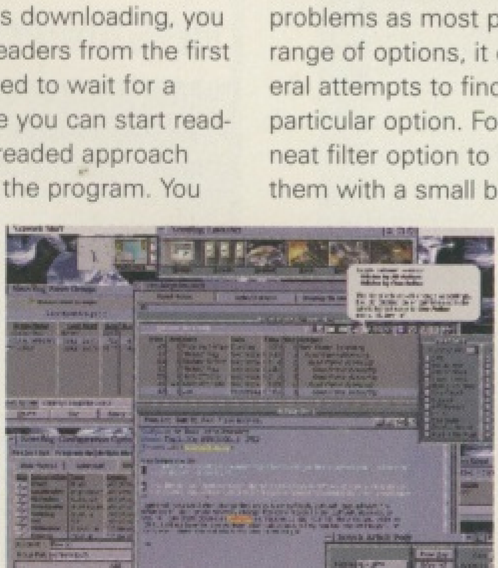
NewsRog makes extensive use of multitasking. For example, you can select a number of groups for header download, then select some more groups for full download. While the second batch is downloading, you can start browsing the headers from the first group. You don't even need to wait for a download to finish before you can start reading articles. This multi-threaded approach extends to all aspects of the program. You can have multiple newsgroup windows open, reading threads in several groups at once (this assumes that your brain also supports concurrent multi-threading and memory caching).

One of the most difficult tasks for a news reader is interpreting and showing article threads correctly. It's made all the more difficult by other people using broken news readers (or browsers) that omit References: headers, or have an incorrectly set clock. NewsRog copes with threading well, with a single key used to both scroll the contents of an article and thread to the next one when you reach the end. As with almost everything else, thread display is configurable and can be remembered when you quit, avoiding the need to save settings each time you change something.



▲ File attachments can be displayed inline.

The configuration options of NewsRog are immense. Although it is easy to set up for initial use, you can spend hours playing with the various filtering, display, killfile and other options. However, it then shows the same problems as most programs with a large range of options, it can sometimes take several attempts to find the place to change a particular option. For example, NewRog has a neat filter option to hide signatures, replacing them with a small box that you click on to show the sig. I wanted to disable this for a while, but whatever I did in the Group Filters window made no difference. Later I found another setting in the global config window. This is a fairly minor problem, but is indicative of what's involved with so many options. The documentation is provided in HTML, so an option to display context-sensitive online help, using the browser of your choice on the NewsRog screen, would be a real benefit. The MUI bubble help for the various gadgets and windows is very comprehensive, but there are times you need more extensive documentation. As the provided documentation is already very good, it's a shame that it's not already linked.



◀ NewsRog has a wide range of options and a highly configurable interface.

NewsRog is a very powerful, and reasonably easy to use, news reader. If you want news only, say as a complement to YAM, it is well worth a look. The system requirements may seem high for a news reader, but this is a powerful program and deserves an Amiga to match. If you're still not convinced, have a look at the demo on this month's CD. ■

Neil Bothwick

The Competition

The obvious comparison is with THOR. The interface is certainly more modern, and initial use is much easier. However, it doesn't handle email and has no arexx port (aside from the basic one from MUI). If you don't need the total control or email facilities of THOR, NewsRog is a strong alternative.
MicroDot also handles email, and is very easy to set up and use. But NewsRog is a far more powerful program, maybe a bit too much for the casual news user, but much better for anyone serious about usenet.

NEWSROG

System Requirements: Mimimum: 68020, AGA, 8MB RAM. Recommended: 68040: Graphics card, 16MB RAM

Ease of use 89%
As easy as a program this powerful could be.

Performance 93%
Does almost anything most people need in a news reader.

Value for money 87%
$40 for a news reader is a little high compared with the shareware alternatives.

OVERALL
An excellent program for all usenet fans

91%

Rexecute

■ **Price: £19.99** ■ **Supplier: Weird Science**
✆ 0116 246 3800 ✳ **http://www.weirdscience.co.uk**

You can solve problems easily in ARexx, without learning system programming in a lower level language like C. This ease of use has its price, so the report of a new ARexx compiler caught my eye...

Rexecute does not turn ARexx scripts into machine code, although the files it creates are executables, they still need rexxmast running to work. This also means there is no speed increase as a direct result of compilation, although the compiler removes all comments and indentation, which in itself can give a 10-15% speed increase.

However, there are several other advantages. The compiled file is an AmigaDOS executable, it can be run in ways that a script can't. You can use it as the default tool of a project icon, or give it a Tool icon and pass arguments to it by shift clicking other icons. Provided rexxmast is running, it behaves exactly like any other Tool.

Rexecute can produce three different types of file. The most obvious is an executable that can be run from shell or Workbench. It can also compile into a script. Why? Because many programs have the facility to run ARexx scripts internally, so you can take advantage of the other features of Rexecute and still be able to run the script from within ImageFX or whatever. The third type of file it produces is a linkable object, usually stored within a link library.

Not quite right

Link libraries are potentially one of the most useful features of Rexecute, but, and it's a very big but, the implementation has a serious flaw. When you try to include more than one function, either from a single library or from separate libraries, only the first is added to the final file.

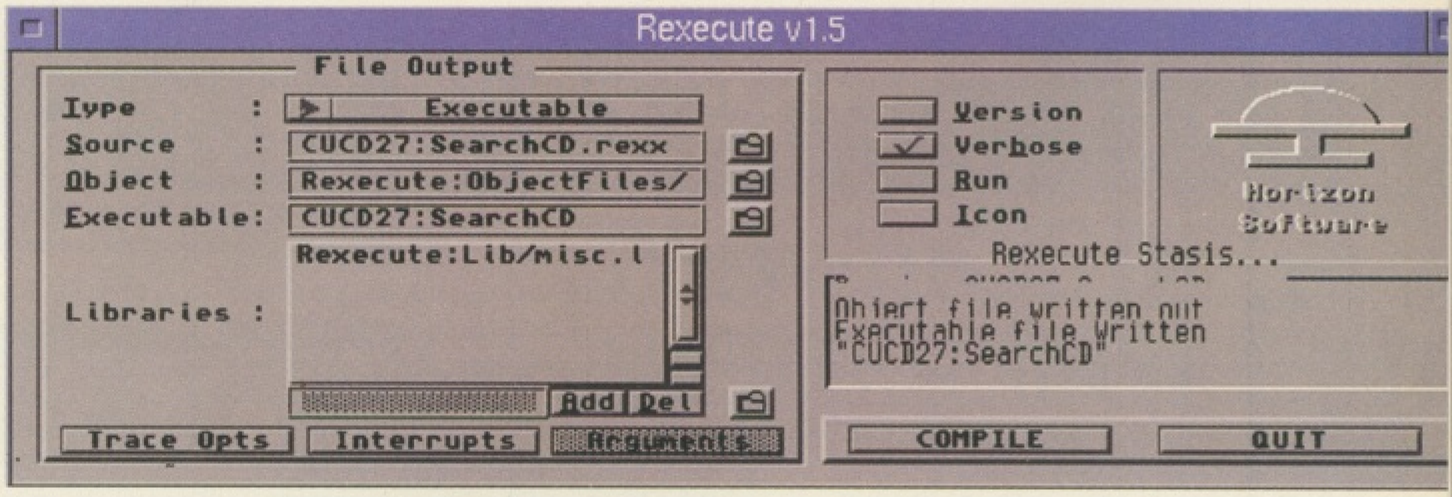
Rexecute reports finding and adding each function, but only the first appears in the script. Weird Science were quick to try and help with this, but it's up to the programmer and no fix had appeared by the time this review was completed. Rexecute can be operated from it's GUI, from a shell or through its ARexx port. The GUI looks a bit old fashioned – it's not even font-sensitive – but it does the job. As well as selecting the type of file created, you can control tracing and interrupt settings, which is more convenient than editing the script to make a temporary change. One criticism of the GUI is that because it is not resizable, you can only see the last couple of lines of output in the status window, an option to log this to a file would be very useful.

The shell and ARexx control make it suitable for control from an external script or makefile, very useful if you have a number of linked scripts to maintain. There is a demo script supplied that shows how you can control just about every aspect of Rexecute through its ARexx port. Rexecute is extremely fast, compiling a 100K script (CfgSortMail.thor) in less than half a second on my 4000/060, and reducing it to less than 20K as an executable. Small scripts do end up larger when compiled, because of the extra code needed to run them from Workbench. The new SearchCD program on this month's CD is 18K, from a 6K script.

Conclusion

I like the concept of Rexecute, but it doesn't quite live up to its potential yet. The GUI is a bit clumsy, although functional. If the link library problem is fixed this would be a much better program, one that I would strongly recommend. ■

Neil Bothwick



▲ It may not be the prettiest front end, but it's functionality that you really want.

Link libraries

A link library is a collection of functions that you write once and then call from other scripts. For example, every time you want to open a file for reading you need something like:

```
if ~open(infile,'Path:to/myfile,','R') then do
say 'Error message'
exit
end
```

With Rexecute you can compile this and other routines you use into a library, declare it at the start of your script and call it with:

```
call ReadFile(infile,Path:to/myfile)
```

This not only makes writing the scripts much faster, but if you ever find a better way of doing it, you simply rewrite the function and recompile any scripts that use it (a make utility could do the last part automatically). This is a very simple example, for more complex functions, the time savings would be much greater.

REXECUTE

System Requirements Nothing mentioned in the manual, tested on WB 3.1 but should work on 2.04

Ease of use 85%
The GUI is very straightforward, but needs an improved presentation.

Performance 70%
Compilation is extremely fast, but the inability to use link libraries as intended disables one of Rexecute's main advantages.

Value for money 88%
Less than most shareware, for a very useful program.

OVERALL **83%**
If the link library feature could be fixed, the rating would be much higher

Power CD-R Writer

■ Price: £249.95 ■ Supplier: Power Computing
✆ +44 (0)1234 851500 http://www.powerc.cpm

Richard Drummond investigates mass storage on the cheap with Power's CD writer.

Power's CD-R drive uses the same Mitsumi ATAPI CR-2801TE mechanism as Eyetech's EZ-Writer, reviewed last month. Similarly, too, it is offered in a range of guises, internal and external. The device on test here is the external version, which is shipped in a slim-line steel case with an external power supply and weighs in at £299.95. It is bundled with Power's buffered IDE interface and cables, the full IDE-Fix software, the MakeCD CD writing software, and three blanks disks. Other external options include the drive housed in a rather nice SCSI TwinBox case with either a 2.1GB IDE hard drive (for £429.95) or a SCSI 32x CD-ROM (£389.95).

Cheap 'n' easy

The advantages of taking the IDE route for CD writing is that it provides a solution that is low cost, simple to install and easy to configure. The disadvantage is that, because of the Amiga's poor IDE interface, a lot of processor time is required to maintain sufficient throughput of data to the drive. CD-R drives need to be constantly fed with data, otherwise the disc being written is ruined - a so-called 'coaster'. To be fair though, similar problems would occur when using a SCSI device if the controller were a non-DMA, low bandwidth one like the Squirrel.

The case that houses the Power drive is serviceable; it has a small footprint, but lacks the ruggedness of the Eyetech case. A really annoying fault with it is that the connector for the PSU has a tendency to fall out. This is obviously not something you wish to happen when writing a CD. The actual process of writing a CD-ROM drive is a complex one, nothing like the transparent way in which we are used to copying data to magnetic media. Thankfully, the MakeCD software supplied is excellent. It features a novice mode and context-sensitive help; the latter gives a simplified GUI and is ideal for the beginner and for quick jobs. The expert mode provides the more advanced control over MakedCD's options.

In operation, the Power CD-R system performs adequately. With an 060 processor and plenty of RAM there is enough CPU cycles left over to do some low-grade multitasking (anything less than 040 though, and your machine will grind to a halt and the disc being written to will suffer). It copes admirably with writing on the fly as well as from an image file. The drive does struggle to reach its claimed double speed writing at times though.

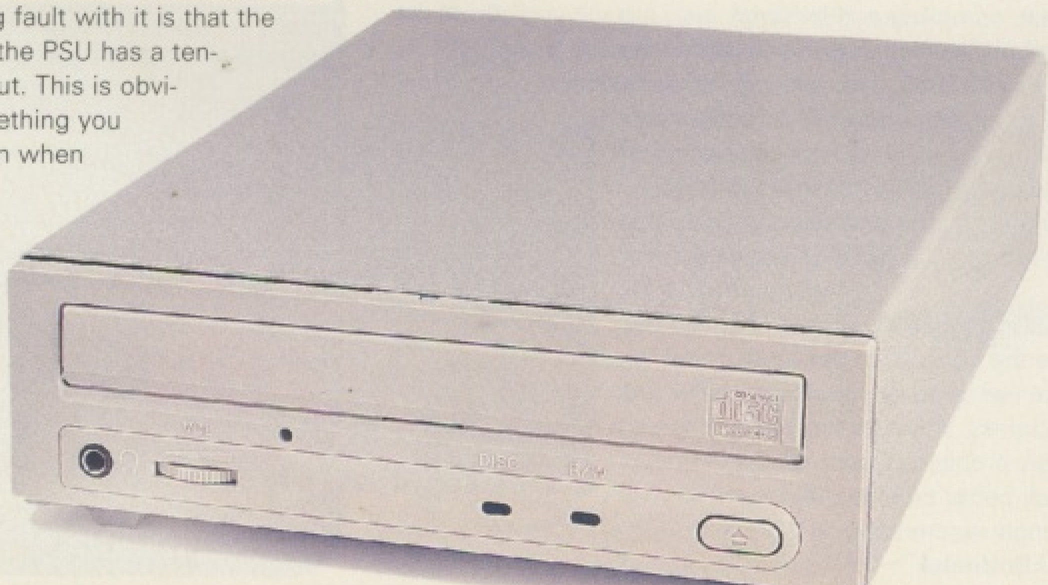
The competition

The only differences between Power's CD-R system and Eyetech's is the packaging. With Power your £300 nets you the drive, a cheap quality case and PSU, MakeCD and the four-way adaptor; with Eyetech the same money buys you the drive, a high quality case and MakeCD.

While both these packages offer fair value for money, neither are outrageously cheap. The essential components of both systems are the Mitsumi mechanism, available from PC vendors for a shade under £200, and MakeCD, the TAO version of which retails in the UK for £34.95. A quick bit of arithmetic reveals that you are paying at least £65 for the case and any other extras.

There really is not much to pick and choose between the Power CD-R and the EZ-Writer; essentially they are the same package. If you haven't already got IDE-Fix and a four-way adaptor then Power's system offers slightly better value for money. For my money, I would opt for the Eyetech system, merely because of its better case. ■

Richard Drummond



EZ-Writer revisited

Last month we tested Eyetech's EZ-CD Writer system. We liked the drive and gave it, in my opinion, a good review. Eyetech, on the other hand, disagreed and made a number of complaints. The bulk of these complaints were rather trivial, but they did object to us saying 'the Mitsumi mechanism has a poor reputation for reliability'. As this mechanism is used in the Power drive, also, I believe this would be an appropriate place to clear this up.

I wish to stress that no problems or faults occurred while testing either Eyetech's and Power drives; the above quote was based on opinion only. In fact, Eyetech claim that Mitsumi have had a record low number of returns with this mechanism. Eyetech were clearly fishing for a Superstar medal for their drive; but I stand by my initial review. The EZ-Writer is good – but not exceptional.

Eyetech are now shipping a cheaper version of the drive, too. The economy EZ-Writer SE is identical to the EZ-Writer package we reviewed, except that it's housed in a slim-line case with external PSU like their EZ-CD SE drives.

POWER CD-R WRITER

System Requirements: Any Amiga, WB 3.0+, IDE interface (040+ processor & 16MB recommended) WTXT

Ease of use 91%
Easy to install, configure and use.

Performance 80%
Satisfactory but not exciting performance.

Value for money 86%
Good but not outstanding value.

OVERALL
Another good entry level CD-R system
86%

MAGNUM

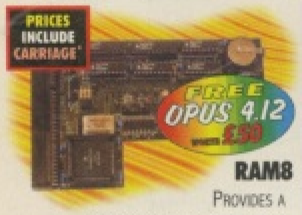
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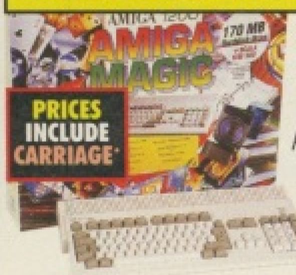
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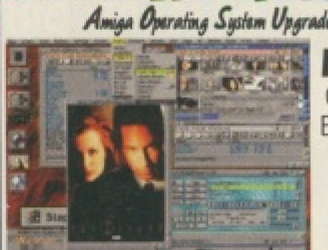
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Atéo A1200 Tower

■ Price: from £129.00 ■ Developer: Atéo Concepts

■ Supplier: White Knight Technology ✆+44 (0)1920 822321

Is there room in the market for another A1200 tower solution? Atéo Concepts clearly thinks so.

The tower case is perhaps the most desirable upgrade for Amiga 1200 owners. You only have to remember the scene at this year's World of Amiga show when hordes of avid Amiga users descended on Power and Micronik's stands intent on buying a new home for their beloved 1200s. For those who haven't yet rehoused their machines, there is a new tower on the block from Atéo Concepts.

This newcomer, the Atéo Tower, is well constructed and finished. It has a sturdy steel frame, the moulded front is attractive, and the rear slots have been professionally machined. The unusual feature at the rear of the tower is that instead of having slots to accommodate expansion cards, it has a square cutaway. This is so that the tower may be used with both Zorro card systems – where the cards are mounted horizontally – and with the AtéoBus system – where the cards are mounted vertically.

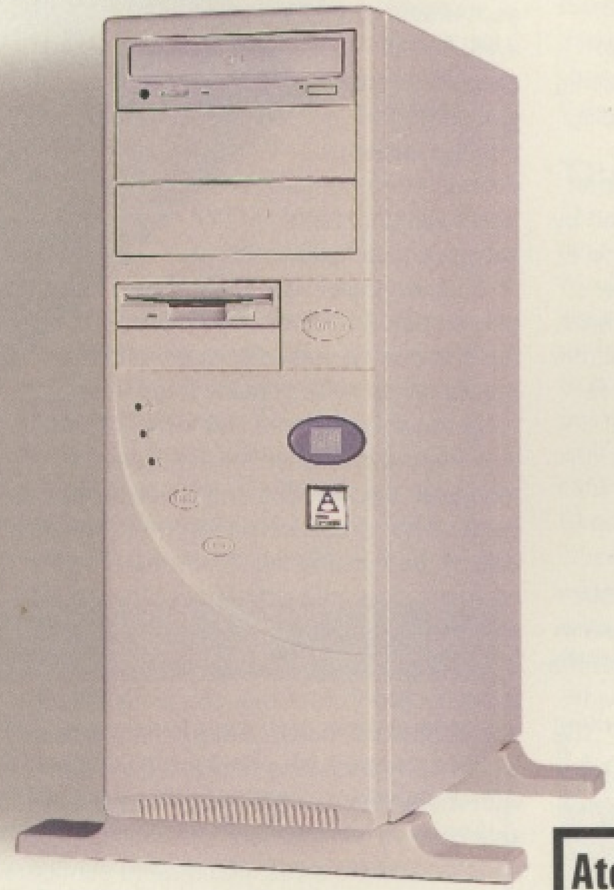
Tower trouble

When you consider the number of Amiga owners who have performed tower conversions, you can see that it's a relatively straightforward task that anybody who can use common sense and a screwdriver can perform. The Atéo Tower is no exception. The instructions provided are rather hazy, but may be easily followed with some thought.

The three common problems to be solved when transferring an Amiga 1200 motherbeard into a tower case are how to connect the power supply, how to connect the keyboard and what to do with the floppy drive. These problems are corollaries of the fact that the A1200 motherboard simply wasn't designed to live in anything else but its original case; the different tower packages available tackle these problems in various ways.

The Atéo tower attempts no solution to the first problem: unless you have a Zorro busboard or the AtéoBus system, there is no easy way to hook up the internal PSU. You will have to construct your own connector for this PSU (not too tricky a task, but requires some soldering) or power the motherboard with your original external PSU. You can still use the internal unit to power storage devices and so on, but it is not a perfect answer, since it in some way negates the advantage of owning a tower.

The second problem, that of attaching the keyboard, this tower solves effortlessly. The Atéo Tower is shipped with their excellent keyboard interface built in. Fixing this to the A1200 motherboard is a bit finicky – it involves fitting a rather delicately constructed socket onto the keyboard processor chip on the motherboard – but should provide no real difficulties. This keyboard interface is one of the best on the market: it works with both Amiga and PC keyboards, offers a sensible keyboard mapping, allows multiple keypresses and provides a reset line which may used with the reset button on the front of the tower.



The floppy drive problem is more of an aesthetic than practical issue. If you install your A1200's internal drive into a tower, the lack of a front bezel leaves an ugly gaping hole in the otherwise immaculate frontage. Atéo are currently working on a face-plate to remedy this, but the other option is simply to buy a new drive; White Knight will supply one for £30.

The AtéoBus

One of the most compelling reasons for towering your Amiga 1200 is to provide room for expansion cards. For the Amiga this has always meant Zorro and for the 1200 meant buying an expensive Zorro busboard, such as those manufactured by Micronik and RBM. Not any more, however. Atéo have created their own custom bus system, derived from the ISA standard. While this system is not compatible with Zorro it is cheaper and faster. Turn to pages 62-63 to read our review.

Neat solution

The striking aspect of the Atéo Tower is how integrated a solution it provides. With the exception of the power connector lack, everything functions so well together. The reset button works (via the keyboard interface); the status LEDs work (a small PCB clips over the header on the A1200 motherboard and diverts the signals to the front panel); even the clock speed read-out works.

The Atéo Tower is a professional and well-finished product. While it lacks the beef-cake look of the Power Tower and is short of the gigantic storage space offered by Eyetech's EZTower, it is nonetheless an attractive option. If you plan to buy the AtéoBus system then this is the ideal tower choice. ■

Richard Drummond

Atéo 1200 Tower

System Requirements: Amiga 1200, common tools

Ease of use 91%
Straightforward construction despite the poor instructions provided

Performance 93%
A neat and professional solution

Value for money 90%
Comparable in price to other tower packages

OVERALL
An elegant and well-finished tower, especially if you intend to get an AtéoBus

92%

AtéoBus & Pixel64

■ Price: £299 ■ Developer: Atéo Concepts
■ Supplier: White Knight Technology ✆ +44 (0)1920 822321

AMIGA MAGAZINE SUPERSTAR

The AtéoBus promises cheaper and faster expansion cards for the Amiga 1200 than Zorro. Does it deliver?

The advent of tower kits for the Amiga 1200 has opened up realms of expansion that the original designers would have never have believed possible. However, the one feature lacking from the 1200 is the ability to use plug-in expansion cards like its big brothers; the big box Amigas employ a proprietary standard known as Zorro for their expansion slots.

Zorro is an excellent system, although showing its age. For example, its AutoConfig system has always been truly plug and play, much to the envy of PC users. But Zorro cards are expensive. Not only that, the graft-on Zorro buses - such as those developed by Micronik and RBM - which enable the use of Zorro cards with an A1200 are expensive, too. Also, in today's dwindling Amiga market, Zorro cards are becoming increasingly harder to find. Atéo Concepts have attempted to solve all these problems in one with the release of their custom bus system, the AtéoBus.

New from old

The AtéoBus is an enhancement of the ISA (Industry Standard Architecture) bus found in PCs. It does not allow DMA transfers, but the modification does allow a greater bandwidth of 9Mb/s - significantly better than Zorro. The bus controller plugs into the expansion (trapdoor) slot of the A1200, and provides a pass through for any existing card. The AtéoBus is compatible with a wide range of accelerator boards, but you should contact White Knight to to make sure your board will work.

Obviously, the bus system can only be fitted to a towered-up 1200. The new Atéo Tower (see review on page 61) has been modified to make the installation of the AtéoBus as simple as possible. The problem is that the cards are mounted vertically - rather than horizontally, as expected by most towers; there is a conversion kit available to ease the process of fitting it to other towers. The AtéoBus does not mask the whole of the A1200's motherboard like the Zorro busboards do, but the clock header is obscured, a point to note if you already have some hardware that attaches there.

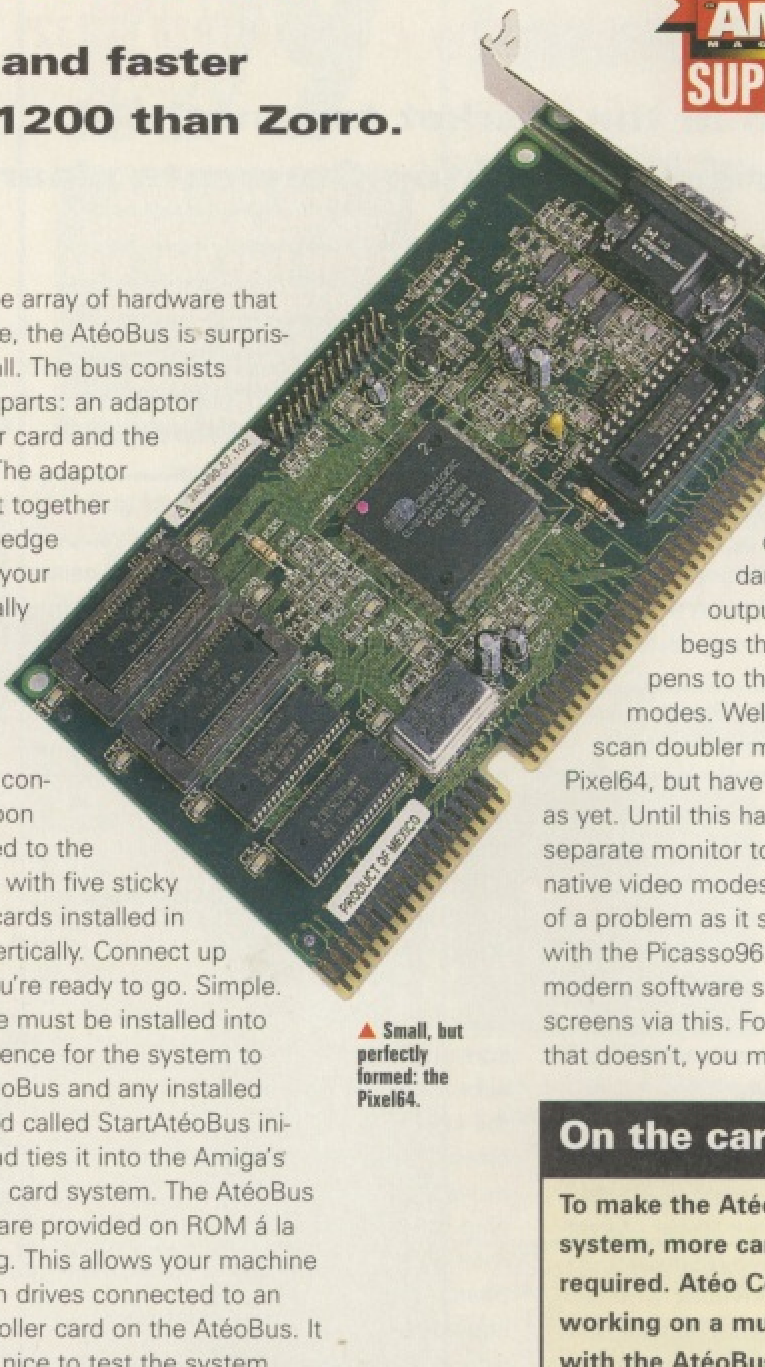
Considering the array of hardware that forms the package, the AtéoBus is surprisingly easy to install. The bus consists primarily of three parts: an adaptor board, a controller card and the busboard itself. The adaptor and controller slot together and attach to the edge connector where your accelerator normally lives, and the accelerator then plugs into this. The bus board is connected to the controller via two ribbon cables, and is fixed to the floor of the tower with five sticky plastic feet. Any cards installed in the bus, mount vertically. Connect up the power and you're ready to go. Simple.

Some software must be installed into your startup-sequence for the system to recognise the AtéoBus and any installed cards. A command called StartAtéoBus initializes the bus and ties it into the Amiga's normal expansion card system. The AtéoBus also allows software provided on ROM á la Zorro's Autoconfig. This allows your machine to be booted from drives connected to an IDE or SCSI controller card on the AtéoBus. It would have been nice to test the system with more than just the one currently available card. At the moment it is unclear how difficult multiple cards would be to configure or whether the use of several cards would have any effect on bus performance.

Atéo say that their cards are shipped with all necessary jumpers preset and that the driver software prevents IRQ conflicts; this will ensure that there are no configuration problems like those associated with ISA on PC.

Pixel perfect

The first compatible card for use with the AtéoBus is the Pixel64, a 2D graphics card employing the Cirrus Logic GD5434 video processor. It is shipped with 2MB of memory and supports screen modes of up to 1280x1024 at 75Hz in 8 bit and 800x600 at 85Hz in 24-bit.



▲ Small, but perfectly formed: the Pixel64.

The card itself compact, about half th length a typical Zorro card, has only one connecto on its backplate, a standard 15-pin VGA socket fo output to your monitor. This begs the question of what happens to the Amiga's AGA display modes. Well, Atéo are working on a scan doubler module for use with the Pixel64, but have no release date planned as yet. Until this happens, you will need a separate monitor to display the Amiga's native video modes on. This is not as much of a problem as it seems. The Pixel64 ships with the Picasso96 RTG software; most modern software supports retargetable screens via this. For an OS-friendly program that doesn't, you may use a mode promotio

On the cards

To make the AtéoBus a truly useful system, more cards are obviously required. Atéo Concepts are currently working on a multi I/O board for use with the AtéoBus which should be ready by the time you read this. It will feature two 115Kbaud serial ports and two parallel ports. The parallel ports are rumoured to be ECP/EPP ports of the type used in modern PCs. This open ups the possibility of using parallel Zip drives and cheap parallel scanners with your Amiga. Others cards planned include a Sanall compliant Ethernet card, a SCSI controller, an IDE controller and a 16 bit sound card. With the exception of the soundcard prices are aimed to be about £50 per card. Stay tuned to http://www.ateo-concepts.com for the latest information.

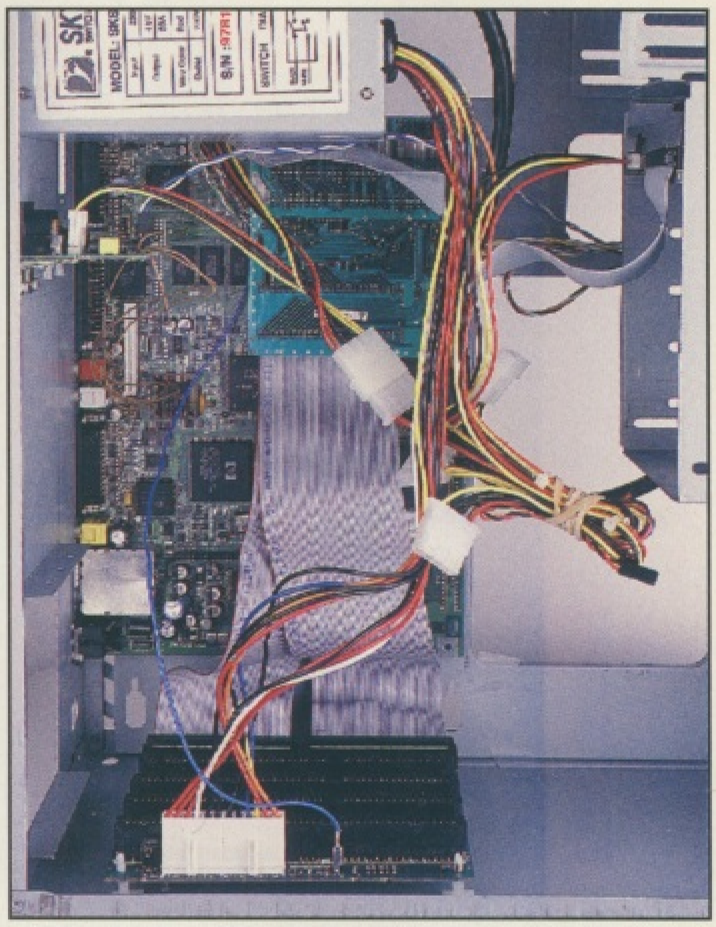
The WSpeed test

WSpeed is a benchmarking tool which assesses graphics performance via standard OS drawing functions. Higher figures mean better performance.

	A	B	C	D	E
Put Pixels	773170	3487833	872647	766573	764432
Draw Lines	11520	104467	21179	18150	14136
Draw Circles	36698	40115	73383	1899	1898
Draw Boxes	4210	746	7314	2417	1340
Scroll X	796	1447	723	77	380
Print Texts	31806	17056	35268	21012	20764
CON: Output	699	1012	729	773	444
Open Windows	344	210	397	473	422
Size Windows	552	686	614	568	566
Move Windows	190	84	203	323	200
Swap Screens	593	500	594	500	501
Area Fill	391	29862	448	1176	652

Key

	Machine	Screenmode
A	A1200 060/66 CV64/3D	P96 800x600x8
B	A1200 060/66 CV64/3D	CGX 800x600x8
C	A1200 060/66 Pixel64	P96 800x600x8
D	A1200 060/66 AGA	640x256x5
E	A1200 060/66 AGA	640x512x8



▲ **The AtéoBus in place in one of Atéo's towers.**

utility (there is one supplied with the card, or use MCP's screen manager) to force it to open on a Picasso screen.

The Picasso96 software supplied is easy to install and configure. The predefined screenmodes should work with most monitors, but if not, the PicassoPrefs program allows the definition and editing of screen modes suitable to your particular monitor. The drag and drop interface is straightforward to use, and the edit feature makes it simple to define a screenmode, and tweak it while being displayed.

In operation, the Pixel64 is fast. If you are used to AGA then you'll be blown away by the speed of screen updates, even in high resolution, high colour screens. After running your Workbench in 800x600 with 65,000 colours, you'll wonder how you used to survive with AGA. The benchmarks stated in the boxout appear to show that the Pixel64 with Picasso96 performs significantly slower in some tests than the CyberVision64/3D card under CyberGraphics. My guess would be that this difference is caused merely because CGX is the more efficient of the two RTG packages; the Pixel64 is the faster of the two when both cards are running under Picasso96. Strangely enough, considering the results, the Pixel64 seems quicker in general use. The Quake tests really shows where the increased bandwidth of the AtéoBus comes into effect. Quake playing on the Pixel64 varies from a third to twice as fast as the CyberVision card.

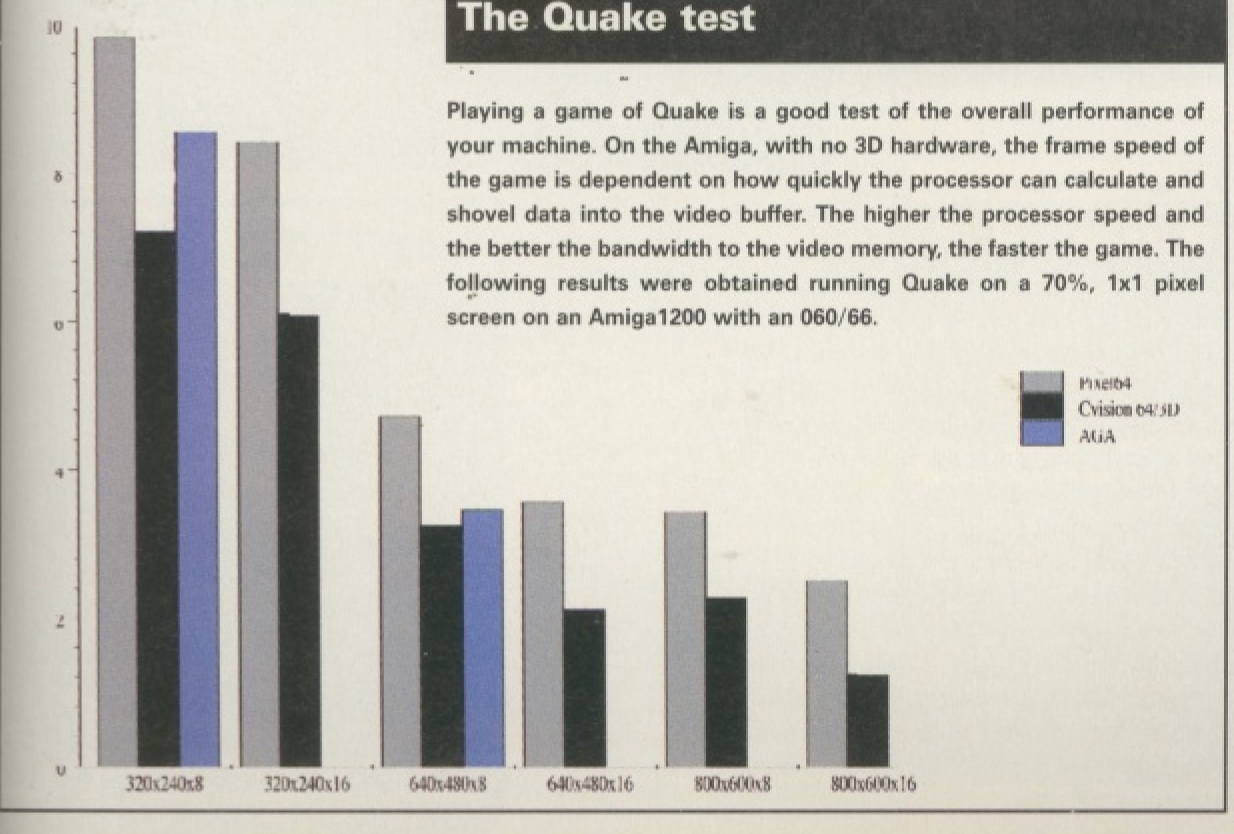
The choice

The AtéoBus and Pixel64 is an excellent, low-cost package. If it had appeared a year ago, I would have had no hesitation in recommending it to anyone. As it is, if you have not currently expanded your A1200, this is the way to do it. However, if you are lucky enough to own a Blizzard PPC card, you may wish to wait until the more powerful BlizzardVision card appears. Still, even if you have a Blizzard, you should still consider the Atéo, since it promises a cheap way of adding ethernet and a 16-bit soundcard, traditionally expensive add-ons for the Amiga. ■

Richard Drummond

The Quake test

Playing a game of Quake is a good test of the overall performance of your machine. On the Amiga, with no 3D hardware, the frame speed of the game is dependent on how quickly the processor can calculate and shovel data into the video buffer. The higher the processor speed and the better the bandwidth to the video memory, the faster the game. The following results were obtained running Quake on a 70%, 1x1 pixel screen on an Amiga1200 with an 060/66.



AtéoBus & Pixel64

System Requirements: Amiga 1200 in a tower case, a compatible accelerator and 4MB Fast RAM.

Ease of use 91%
Surprisingly easy to install. The Picasso96 software simple to configure and use.

Performance 85%
With only one card available, it is difficult to judge bus performance. The Pixel64 offers good but not outstanding performance.

Value for money 93%
The cheapest way to get 24bit graphics on an A1200, with more cheap cards to follow.

OVERALL
A flexible and cost effective way to expand your A1200.

92%

Kodak DC210 Zoom

■ **Price: £599 (street price £540)**

■ **Developer: Kodak Digital Science** http://www.kodak.com

Kodak's highly acclaimed mid market digital camera has become Amiga friendly – but is it all it is cracked up to be?

Power Computing's budget wonders have tied up the lower end of the digital camera market on the Amiga, but up – market it becomes a little trickier to find the right product. The only software support for mid priced digital cameras has come in the form of the Camcontrol software for the Olympus C range and the Minolta Dimage 5. Matthias Bock has just given us another choice with the release of DC210Wizard, a simple utility for downloading images from the Kodak DC210. Kodak's award winning camera is only the second megapixel camera to hit the Amiga. The other, the Olympus C1400L, is a very nice camera indeed, but even with recent price cuts has an RRP of a thousand pounds. The DC210 offers 1152 by 864 pixels (about 4,500 short of megapixel resolution, but we can forgive them) and a 2x zoom with a field of view roughly equivalent to a 29-58mm zoom on a 35mm camera or a 50-100mm on medium format. It has 4MB of storage on a removable card, a 1.8" TFT colour LCD screen, PAL/NTSC video out and so on, all for a very fair price.

The autoexposure seems accurate in a range of lighting conditions and white balancing is good under tungsten or flourescent lighting. The aperture and shutter speed cover decent ranges, and the CCD sensitivity is a respectable ISO/ASA 140 equivalent. The built in flash will do automatic, fill in and red-eye reduction.



▲ Best quality with some post processing courtesy of ImageFX.

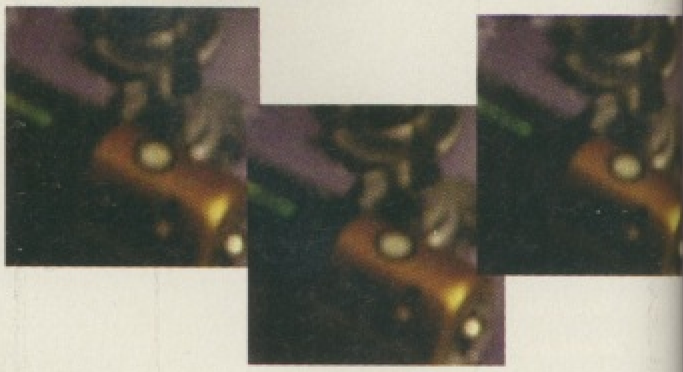
The software

Matthias Bock's DC210 Wizard is as simple as it gets. A window displays a list of the pictures in the camera's memory and allows you to mark the ones you want for download. There is as yet no pre-viewing facilities, but the camera can do that for you. You can find the software on this month's CUCD in the mag drawer, and with enough interest Matthias will add more features. As the KodakDC200 series encodes everything internally, I guess this is a simple serial download protocol, so the software will probably work on similar Kodak cameras including those with 1.3 or 1.6 M pixels.

Liquid crystal

The LCD display is icon driven, with a dustbin icon for discarding images, a magnifying glass for zoom and so on. In review mode you can scroll quickly through thumbnails of the stored images and display them at full size, scrolling the LCD screen across the image. In the preferences screen you can choose megapixel or VGA (640 by 480) resolution, and have a choice of three levels of compression. Unfortunately all this functionality comes at a price – power consumption. Batteries are consumed at an alarming rate, so stock up on NiCADs and keep recharging. The power supply, rather annoyingly, is an optional extra.

Ergonomics are good but not perfect. The control buttons for the LCD are so logical you won't need the instructions, but the power button and the shutter button are so close to each other that you can mix them up, and the lens is positioned too near the hand grip, making it prone to greasy fingerprints. Having the front element of the lens exposed like this is not good, it makes it vulnerable to scratching.



▼ Close-ups of (left to right), hi-res good, high-res better, high-res best. (courtesy of ImageFX)

Image quality is good, with little JPEG artifacting visible on best quality, but better images can be had elsewhere. The lens is soft and it does show in the final image. Kodak are not noted for their lens design, and convenient as zoom lenses are, they are inherently inferior to fixed lens designs. The MegaPixel Konica Q-100 sports the rather excellent little Hexanon lens and a better resolution at a lower cost, but is lower specified and, most importantly, has no Amiga software.

The Olympus C1400L remains a better camera in many respects, but is a lot more expensive. At this price range the Kodak DC210 is, on the Amiga at least, unrivalled. Smart, easy to use, much better results than the cheap cameras, and all in all worthy – just – of a Superstar. ■

Andrew Korn



▲ At 800% enlargement there is still plenty of detail.

Kodak DC210 ZOOM

System Requirements: OS2 Amiga, accelerator & HD advised

Ease of use 94%
Excellent, feature packed without ever becoming complex

Performance 85%
Great features, decent image quality.

Value for money 90%
Superb features for the money, a little behind the cash on resolution though. Costly in batteries!

OVERALL
For those who want a serious digital camera without paying silly money, Kodak comes up trumps.

90

PD.net

The gargantuan legend, Dave Stroud, makes his final appearance for CU Amiga before sloping back to his New Forest cave dwelling.

Myzar

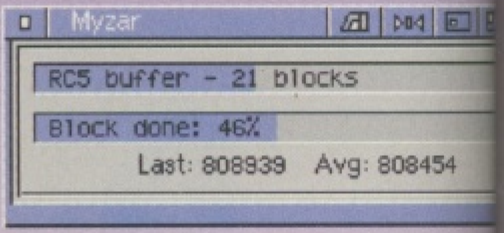
Type: RC5 client GUI
From: http://pratesi.it/~patriot/Myzar/Myzar.lha
Size: 36k
Requirements: MUI, RC5-DES client (680x0 or PPC, version 2.7100.413 – available from: http://homepage.cistron.nl/~ttavoly/rc5/download.html)

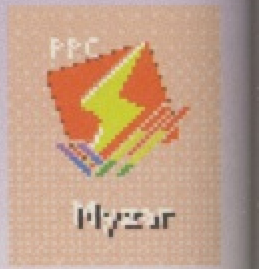
DOWNLOAD of the month

If you've picked up any passing information about "RC5" or "DES" contests, you could be forgiven for thinking that it's very technical. It doesn't have to be. RC5 and DES are merely encryption algorithms, used to encode data with a key (in this case, a 56-bit key) which, in theory, would take an insanely long time to crack. Distributed.net (Http://www.distributed.net) are organising the challenge to crack the code and find the key, legitimately, to an encoded message. By running a client for their machine, computer users all over the world are putting the spare cycles of their CPU to good use in an attempt to break the code in as little time as possible.

If you haven't already joined in the challenge, now is an ideal time. The Amiga team is currently in a very admirable seventh position overall (having enjoyed a short spell at sixth before being overtaken by the "slashdot" team) and all of the information about the RC5 contest (what it is, why you should join in, and how to participate) is available from the Amiga RC5 effort homepage at http://homepage.cistron.nl/~ttavoly/rc5. From these pages, you'll be able to download Myzar, the GUI which makes running the client a piece of cake.

Myzar does away with the need to use the CLI to configure the client. It can be launched from the Workbench screen, or dropped into your WBstartup drawer. It can be iconified so that it operates as unobtrusively as possible, or it can open either of two windows – a large one for displaying what would normally be output to the CLI by the client, and a small configurable one, displaying the information in the form of progress bars.





If you have a Net connection, and you're not yet contributing to the Amiga RC5 team effort, you no longer have any excuses. PPC owners can control the PPC and 68k clients by launching two copies of Myzar, although there are plans to support both in one executable at a later date. The Amiga RC5 team effort needs you, so what are you waiting for? Get cracking! ★★★★★

ExView 1.3

Type: Graphics viewer
From: Aminet: gfx/show/ExView.lha
Size: 32k
Requirements: OS 2.04+



You may wonder about the point to yet another graphic-showing utility. We already have tools like Visage and Viewtek which are quite configurable, and can cope with many different file formats. Why, then, would anybody be interested in ExView? It's not exactly feature-laden: It only shows IFFs (and then only up to 8 bit), and it doesn't yet support graphics cards.

So what's it good for? Well, showing IFFs of course. You don't need to mess about with the CLI. It has an AppIcon, and a GUI, from which you can limit the choice of screenmodes (handy for getting all pictures to display on a screen like that of the Workbench, so that on slower monitors, you don't have to wait for the re-sync to see what you're looking at.) You can also tell ExView how much overscan it can use, and Ryan claims that the program can handle "even the most stressful and bizarre of conditions" – although it took me a moment to realise that he was referring to the Amiga rather than myself.

Okay, so there isn't a lot going for it in the face of current competition. Viewtek, Visage, Superview... they probably all do what you want anyway. But ExView isn't predominantly CLI-based (although you can use it from the CLI) which makes it intuitive and clear-cut. It doesn't pretend to be anything bigger than it is.

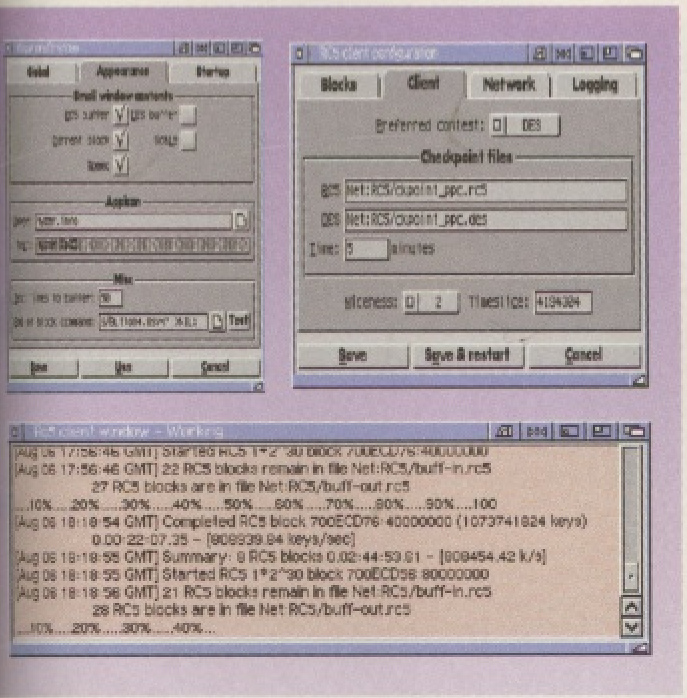


So, if you've got a lot of IFFs lurking around on your hard drive, I can recommend giving ExView a try. Let Ryan know what you think, as he will hopefully continue to improve on the features already present in his program. It certainly has potential, and I for one would like to see this program again after another six months work. ★★★★

VWM 1.5

Type: Utility
From: Aminet: util/misc/VWM15.lha
Size: 25k
Requirements: OS 2.04+

In these days of large screenmodes and many applications and utilities, it makes sense to keep your Workbench screen (and any other screen for that matter) as organised as possible. When that program that you've just downloaded refuses to open its window in the top right of your screen, no matter how much you shout at it, it's time to think about a solution. Thankfully, Bahman Moallem has already thought about it. Virtual Window Manager is the result, and 1.5 is the latest version.



You'll require a little patience to get VWM operating to its full potential, as you'll need to create its prefs file by hand in your favourite text editor. This is where the provided manual is very helpful, listing all the options available to you in order to specify exactly where a window should open.

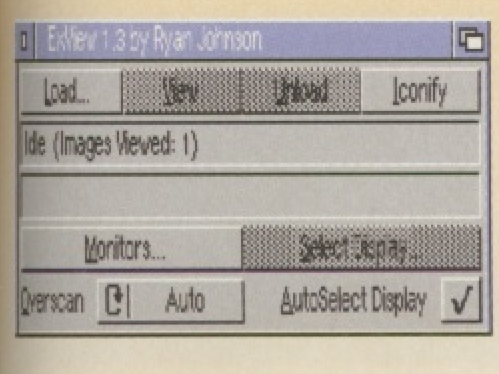
Virtual screens (larger than their visible size) aren't a problem either. Say, for example, that you had a screenmode that could display 640*512, but the screen was 640*1024 – double the height. You might use the top half for your email program, and the bottom half for your web browser, for exmaple. Now, if you load another program, chances are it will pop up its window(s) in the top half of the virtual screen. If you're using the bottom half, you'll need to scroll up to the top half before you can see it. Not very user-friendly.

VWM can solve this, and many other window-positioning dilemmas. You can tell it to open windows at absolute or relative coordinates (from the top left of the whole screen, or the top left of the visible portion). VWM will also force windows to open under your mouse pointer, in the corners of your screen, or at a specifiable distance the screen's edges. Not only can you position windows accurately, VWM will bring the newly opened window to the front if you tell it to, and can even delay windows from opening for a moment, so that you can position your cursor in the position you want it to open before it appears. Not only is VWM highly configurable, it is also free to register. What more could somebody ask for? ★★★★★

Top Tunes

As anyone who has given the Aminet more than a passing glance can probably appreciate, the mods directory is a daunting prospect to browse through. With more tunes than your local chemist, you could be forgiven for pretending they didn't exist so that you wouldn't have to deal with them, in a way not entirely dissimilar from today's treatment of global warming, famine or shampoo adverts that try to baffle you with science.

In an attempt to make your path through the jungle a little clearer, then, comes "Top Tunes" – the result of yours truly being voluntarily subjected to hours of dancey, trippy, hoppy, hippy, moody, grungey modules, before disseminating the resulting information to you, the ever-faithful Amiga owning public. So sit up and take notice.



This month's selection begins with "Lost In Space" (mods/pro/Phm_LIS.lha – 252k), a name familiar to all of us by now thanks to the film, and indeed the Lighthouse Family's single by the same name, although the module isn't a rip-off of the film's soundtrack or the single. Picking up speed after the first minute, and lasting a spacey seven minutes, it endured longer than my interest in the film. Although I have to admit that's only because I haven't seen it yet.

Next up, "Contradiction" (mods/nork/Contradiction.lha – 560k). It wouldn't sound out of place in Turrican 2, and lives up to its name by not being in Turrican 2. Featuring nice changes in mood and lasting a more kettle-boiling three minutes, you won't be left with a headache after listening to this one.

Then, in keeping with a kind of dance tradition, we have a mod featuring a train. "DanceTrain" (mods/techn/DanceTrain.lha – 127k) features a thumping bassline, and lots of train sounds, but thankfully no "all aboard" sample. Quite repetitive though, and just when you think the train sample's been exhausted, back it comes. Thankfully, unlike a real train (dancing or otherwise), you aren't required to wait for it to stop moving before you get off.

Finally, we finish on a calmer note with "Road of Memories" (mods/misc/mw-rmemories.lha – 266k). It's a long, winding road by the sounds of it, probably snaking its way through the Lake District or around a Scottish loch. If you're driving anything down this road, it would probably be a cloud. Lose yourself in two and a half minutes of gentle, calming mood-music. More relaxed than a Horlicks factory .

Exclusive!

You may have noticed the lack of a game review on this month's pages. Well, that's because we have a special little bonus package for you – namely, a bumper selection of games from "NC.Gamez," the makers of Bloog (reviewed back in the June issue). Marcus has kindly provided us with full versions of Fayoh, Moped, SnakesSE, Jackman, the more recent Polataa 5 and, of course, Bloog. All exclusive to CU Amiga, and all yours for the price of opening the drawer on the CD. Believe it, for it is so.

PD.post

Richard Drummond, with one final glassy-eyed look at PD software on floppy disk...

PD.post

Complete C

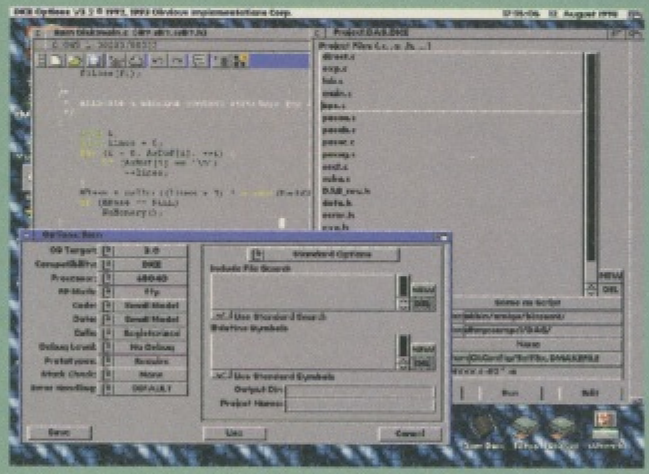
Type: Programming

From: Underground PD, 54 Carmania Close, Shoeburyness, Essex SS3 9YZ

Price: £8.50 (15 disks)

X-Project PD is a new public domain company, and this, their first release, is an ambitious one. They do distribute the normal single-disk type of pd software, but they specialise in themed compilations targeted at particular areas. Complete C is a 27 MB collection of material aimed at Amiga C programmers.

The set comprises 15 disks worth of archived software with an installer script. The main packages here are Matt Dillon's excellent DICE C compiler, the equally excellent vbcc compiler and the C Manual (an in-depth, Amiga-specific C tutorial). The remaining space is taken up with a myriad of different programming tools and utilities.



What immediately struck me about this collection – apart from the packages named above – is the rather indiscriminate attitude with which software has been shovelled onto these disks. No decision seems to have been made as to what would actually prove to be useful or not. Clearly, the compiler of this set has opted for quantity not quality; The other major fault is the poor installer provided. Everything is merely de-archive en masse to your hard drive. everything is provided as is. No attempt is made to install or configure the individual packages – which, in most cases, is a non-trivial task. Some kind of explanation of the software provided would have been useful.

Nevertheless, despite its faults, you cannot dispute the value for money offered by this collection. If you are into programming and don't have access to the Internet, the Complete C may prove a useful starting point. Beginners should avoid it, though. ★★★



Twiddlers Disk 7

Type: Compilation

From: Classic Amiga PD, 11 Deansgate, Radcliffe, Manchester M26 2SH

Tel: 0161 723 1638

Price: £1 plus 75p P&P per order

DISK of the month

This is a bizarre name for a bizarre collection of software. The most noteworthy item in this oddball collection is a suite of programs called Z100. Thomas Omilian's Z100 is a set of tools to improve the life of Amiga owners with Zip drives: FrameZ100 allows the easy copying of data from a Zip disk to your hard drive and vice versa; SafeZ100 is a tool to enable the Zip's password protection and locking features; WatchZ100 is a background process that can be configured to launch another program or script when a Zip is inserted. The package also comes with various mount lists and is designed to function seamlessly with the CrossDOS and CrossMAC systems to let you effortlessly exchange data with foreign platforms. Z100 is CD-ware: if you use it, the author requires you to send him an audio CD.

The rest of this disk is really just filler. There is OXO, which has nothing to do with cooking, but is yet another game of noughts-and-crosses. Why is it that people still insist on writing these things? Here we are in the 1990s; we have this powerful invention, the computer – a tool to perform those monotonous tasks, to analyse masses of data, even to amplify talent – with the potential of processing many million instructions per second. And what do we do? Play one the most dull and senseless games in existence. (Perhaps the author was trying to make a philosophical point about the futility of existence.)

Bringing up the rear is HTML-Creator, a set of tools to automate some types of HTML page creation; VWBeetleIcons, a collection of colourful drawings of VW Beetles for desktops with NewIcons; and TuneUp, a next to useless program that will allegedly help you diagnose engine problems with your car.

Twiddlers Disk 7 is a worthwhile purchase only for the excellent Z100 tools. If you don't own a Zip drive and are not a Beetle-maniac, then it's best to give it a miss. ★★★★

Mini Tiles

ype: Puzzle game

rom: Classic Amiga PD, 11 Deansgate, adcliffe, Manchester M26 2SH

el: 0161 723 1638

rice: £1 plus 75p P&P per order



Mini Tiles is another of those puzzle games in which you have to remove pairs of matching tiles from a stack of tiles on-screen. The difference with this one, however, is that it doesn't employ the tiles from Mah-Jongg. Mini Tiles is colourful, competently executed, but for some reason lacks the one-more-go factor that games of this type usually possess. ★★★

Revenge AGA

Type: Shoot-'em up game

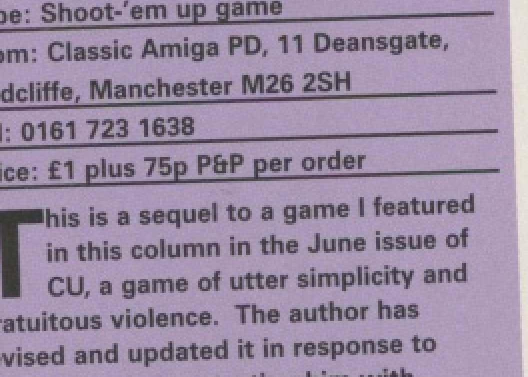
From: Classic Amiga PD, 11 Deansgate, Radcliffe, Manchester M26 2SH

Tel: 0161 723 1638

Price: £1 plus 75p P&P per order

This is a sequel to a game I featured in this column in the June issue of CU, a game of utter simplicity and gratuitous violence. The author has revised and updated it in response to floods of users contacting him with suggestions. You depraved lot! In the interests of decency the screenshot above features only the title page of the game.

The reason Revenge gets a mention here is because the new additions are highly amusing. There are extra victims to shoot at (Hmm, who does that Bill Grates figure look like?), extra weapons to shoot with (Alien Experiment is a laugh) and some cute sound effects. The whole thing is very slickly presented. It still only has a lastability value of about ten minutes though. ★★★★



Music Bugs

Type: Novelty

From: Roberta Smith DTP, 190 Falloden Way, Hampstead Garden Suburb, London NW11 6JE

Tel: 0181 455 1626

Price: 90p + 50p P&P



Music Bugs is a unusual sound creation tool. The idea behind it lies in four bugs wandering about your computer screen.

When one of these crosses a line, a sound is played; the pitch of the sound depends on the colour of the line. You, the user, are presented with a palette of several colours, with which you can draw on the screen using the mouse. You can assign the sound sample of your choice to each bug. It's sounds silly, but you'll quickly get the hang of it. The paths of the bugs may be controlled, too: grey lines make them turn through ninety degrees, white lines through one hundred and eighty.

The "melodies" I managed to produce from these insectoid meanderings sounded more John Cage than Mozart. It takes a bit of practice to figure out where to place the lines in the bugs' paths. More often than not the end result is like an orchestra playing together but with each musician reading from a different score. Perhaps that's due to my own inadequacies. The bugs tend to be unwilling to be guided unless you can draw straight lines – which, when you are as dextrously-challenged with a mouse as I am, is frustrating. A lack of an effective delete tool is annoying, too.

Anyway, Music Bugs is an amusing diversion. It'd probably appeal to young children (or anybody with a less discerning ear for music). ★★★★

AmigaDOS Guide V2.5

Type: Online help

From: Classic Amiga PD, 11 Deansgate, Radcliffe, Manchester M26 2SH

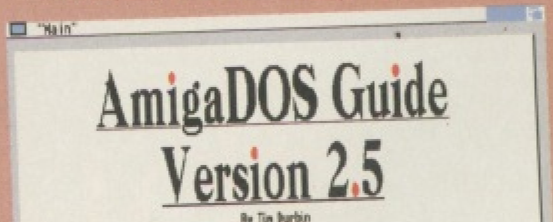
Tel: 0161 723 1638

Price: £1 plus 75p P&P per order

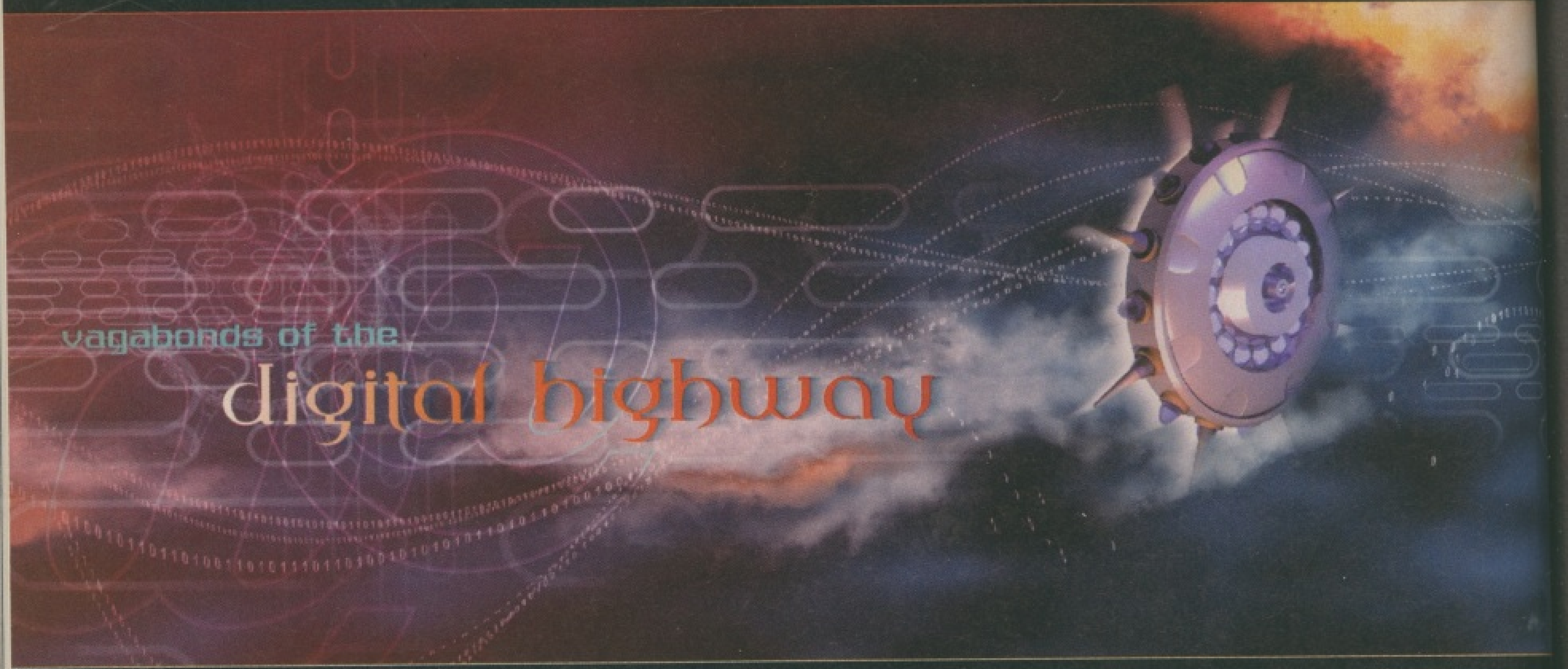
What do you do if you cannot remember the syntax of a particular AmigaDOS command? Well, you could reach for the manual that was shipped with your computer; but chances are you've either lost it or can't be bothered to dig it out. This is where some online help would come in handy. AmigaDOS Guide comes to the rescue! This is a new update to this Guide and was created with Gold Disk's HyperBook authoring system. If you've not seen an earlier edition, it has an easy to follow if rather dated interface. It is a simple matter of just clicking on the command or program you are stumped with and – hey presto – the required information appears. The topics covered here include AmigaDOS commands, Workbench programs, error codes and a glossary of Amiga terms.

On the whole the concept of online help like this is a sound one; it is let down however, by poor implementation. This guide feels too much like an application, is too obtrusive for quick reference. It's not supplied with an install script – when clearly, to be of use, this package would need to be readily available on your hard drive.

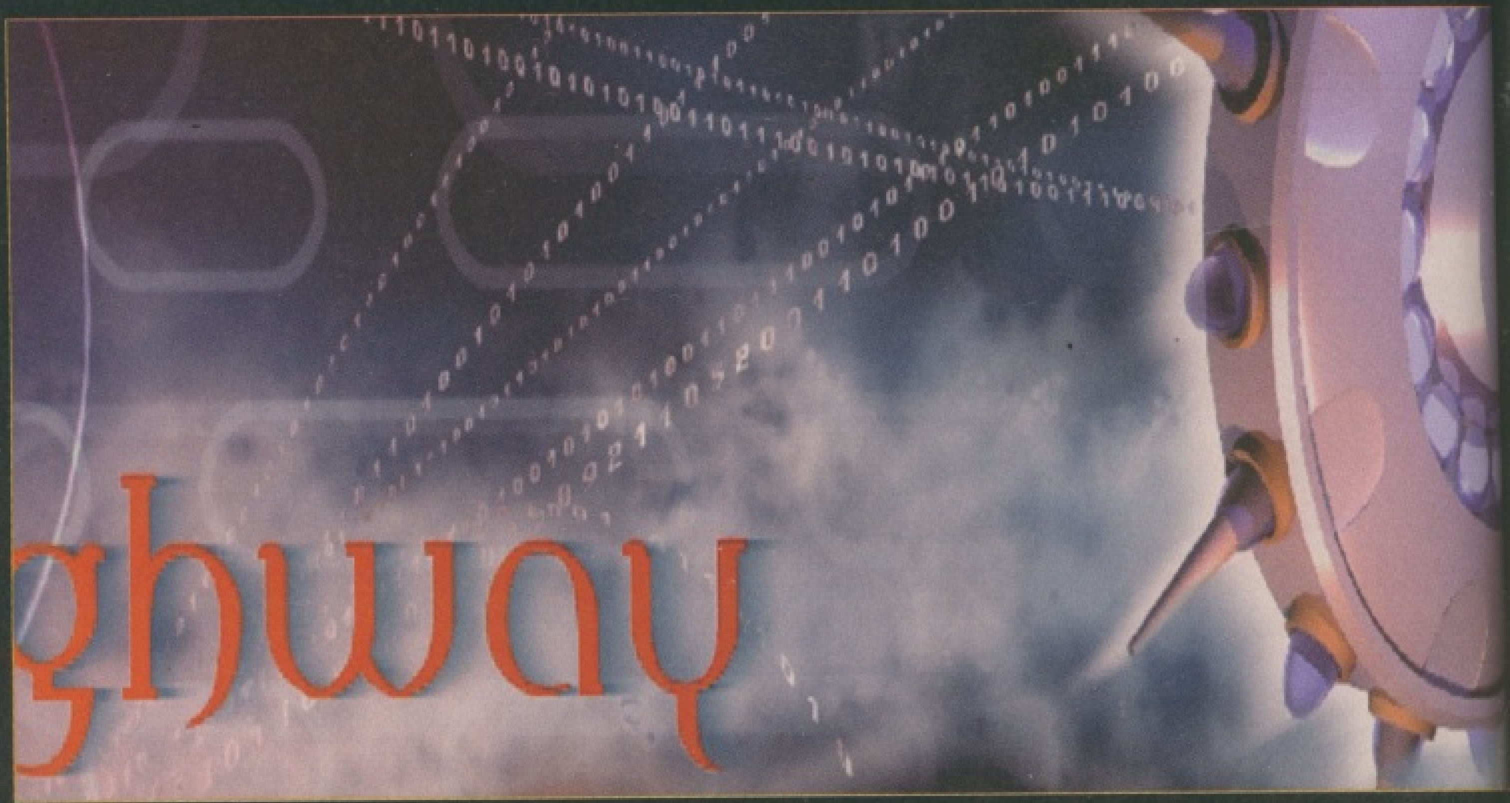
It also lacks a search facility and is marred by a few errors. ★★★



Art Gallery



1



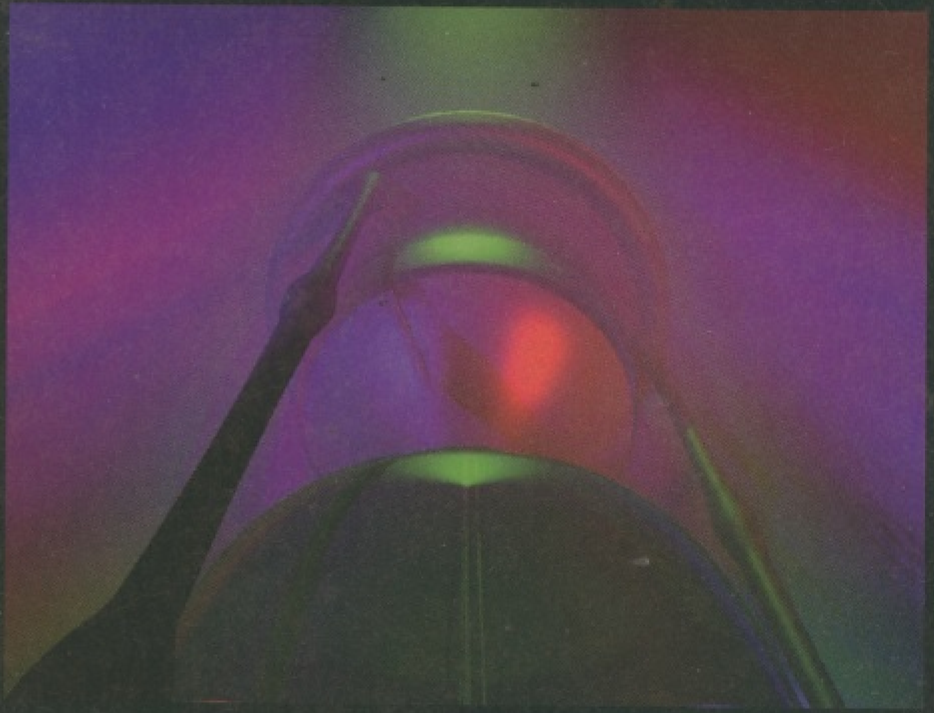
▶ Nice big images print a lot better – check out this close-up to see just how much detail there is.



2



3



4

1. Vagabond of the Digital Highway by James McEwen
This very nice piece of illustration shows that James knows his stuff when it comes to Amiga art packages. He created the vagabond model in Real 3D, then imported it into Photogenics to apply the motion blur and compose the backdrop. The patterned backdrop was created using Photogenics' airbrush tools, and the text created in Drawstudio lite, then used as an alpha channel for subtle texturing to be painted on.

An aspect ratio like this is normally used for wrapover artwork for the cover of a CD or book, where the left hand half of the illustration is on the rear, so that the logo is placed on the right. Constructing it the other way around is far more natural to the Western eye, as we read right to left, but leads to problems if it is cover artwork you are doing – unless of course you are working for an Arabic publisher!

2. High Guard By Ron Fudger - Sherrington
Ron is an Imagine man. He renders in Imagine 4.0 on an A1200 with a Magnum 1230/40 – not exactly a speed demon, although he says his average rendering times are 20-30 minutes. With a faster processor he could get the same rendering times but with more complex texture and lighting, more models and higher resolution output.

This picture is inspired by the Traveller role playing game, and consists of a mixture of Ron's own objects with some from PD sources. Most of his other pictures were Star Trek or Babylon 5 inspired. Some of them were rather better lit than this one, but I was drawn to this one because of the way the scene of massed spaceships is brought to a much more human scale by the rather homely detail on the foreground ship.

3. Fable by Auburn Hodgeson
Auburn based this on a photograph he saw in a magazine. The bridge was modelled using Cinema4D, but Auburn, running on a slim 4MB of RAM, quickly ran out of texture space. In the end he worked the final image with a combination of PPaint and Photogenics, and says that the end result is luck more than anything. I think he is being modest!

Luck plays a part in the creation of any piece of art. You can never transmit exactly what is in your mind to the finished page or screen, and it is understanding and manipulating those accidents of translation that is central to a technically good artist. It is this that 20th Century art, from the automatism of the Dadaists through the drip paintings of the abstract expressionism to contemporary work such as Helen Chadwick's Piss Flowers, has with greater or lesser success spent much of its time exploring.

4. Ourglass by Pinky (Calum Cookson)
Calum is obviously a pretty secretive man, as he tells us absolutely nothing about how this was made. He's only been rendering for a few months, so he's hoping to improve. He says he wants the next one to be a bit moodier – he thinks he should move the lights a bit. The lighting is very nice, although the oddly formal front – on composition is what I think limits the moodiness – it is classically serene, quite Doric.

One thing I don't like about it is that despite the nice high-resolution image, it is a little harsh and grainy in places – not enough anti-aliasing.

User Groups

We hope you'll continue to make good use of our international user group directory, putting you in contact with like-minded Amiga supporters all over the world.

Alpha Software
Location: Newcastle, UK
Contact: Gareth Murfin
Email: gazy@globalnet.co.uk
✆ 01670 715454
WWW: www.users.globalnet.co.uk/~gazy/
Meeting times: 8 - 9pm.
Places: IRC #AmIRC GalaxyNet
Address: Gareth Murfin.113, Cateran Way, Collingwood Grange. Cramlington
Northumberland. NE23 6EZ. UK.

Amiga Christchurch Inc.
Location: Christchurch NewZealand
Contact: Annette Leonardo
✆ +64 03 3390232
Meeting times: 2nd Tues of month, 1900
Places: Shirley Community Centre, Shirley Rd.
Address: ACI. PO Box 35-107, Christchurch, NZ

Amiga Club Genk (ACG)
Location: Genk, Belgium
Contact: Bart Vanhaeren
Email: amiga.club.genk@skynet.be
WWW: http://users.skynet.be/amiga/acg
Meeting times: 1st Sunday of month
Places: Cultural Centre of Genk, meeting room 1
Address: Weg Naar Zwartberg 248 B-3660 Opglabbeek, Belgium

Amiga Computer Enthusiasts of Elkhart, Indiana
Location: Northern Indiana, USA
Contact: Gregory Donner
✆ (219) 875-8593 (after 5pm)
WWW: www.cyberlinkinc.com/gdonner/ace.htm
Meeting times: 2nd Saturday of month
Places: 26728 Hampton Woods Dr., Elkhart, IN 46514
Address: 60300 Pembrook Lane, Elkhart, IN 46517-9167. USA

Amiga Computer Group
Location: Umeå, Sweden
Contact: Martin Sahlén
✆ +46-[0]90-24816 (24 hrs)
WWW: http://www.amiga-cg.se
Meeting times: Tuesdays 19:00
Places: Kafé Station, Umeå
Address: Skolgatan 14, SE-903 22 UMEÅ. Sweden

Amiga Falcons
Location: Malmo, Sweden
Contact: Carl-Johan Rudnert
✆ +46 40 932212
WWW: http://www.algonet.se/~mcisaac/amiga
Address: CJ Rudnert, Veberodsgatan 9, SE-212 28 Malmo SWEDEN

Amiga Forever!
Location: Hampshire
Contact: Stuart Keith
✆ 01703 861842 all day
Meeting times/places: TBA
Address: 101 Ewell Way, Totton, Southampton, Hants S040 3PQ

Amigart
Location: Istanbul
Contact: Guvenc KAPLAN
✆ 00902163020915
WWW: http://www.medyatext.com.tr/amigart
Meeting times: Two a month
Places: Anywhere
Address: Ortabahar sok. No:1 Hayat apt. d:2, 81080 Goztepe-Istanbul. Turkey

Amiga Service
Location: Charleroi, Belgium
Contact: Hoet Raphael
✆ 003271 458 244 (9am-6pm)
Meeting times/places: TBA
Address: Rue Du Nord 93, 6180 Courcelles, Belgium

Amiga User Group of Western Australia
Location: Perth, Western Australia
Contact: Arthur Rutland
✆ 08 93641717
Meeting times: 2nd Tues of month, 1900
Places: Curtin University
Address: 31 Chaffers St, Morley Western Australia, 6062

AmigaTCS
Location: Columbia Missouri
Contact: Terry Booher
✆ (573) 817 2948
Meeting times: 7pm, 2nd tues of month
Places: TBA
Address: 115 West Phyllis Avenue Columbia MO, 65202. USA

Amiga World Special Interest Group
Location: Athens, Greece
Contact: Menis Malaxianakis
✆ 301 - 9026910/9012019
WWW: http://www.compulink.gr/amiga
Meeting times: 1700, Saturdays
Places: Athens
Address: Menis Malaxianakis, Giannitson 11str. 17234, Dafni Athens. Greece

AmyTech Amiga Users Group
Location: Dayton Area, Ohio. USA
Contact: John Feigleson
✆ (937)667-9541 After 6pm EST
WWW:www.coax.net/people/erics/Amitech.htm
Meeting time: 3rd Sat of month, 13:30
Places: Huber Heights Library
Address: AmyTech, P.O. Box 292684 Kettering, OH. 45429-0684

Ayrshire Amiga Society
Location: Irvine, Ayrshire, Scotland
Contact: Maitland or Dale
✆ 01292 267959 or 01294 275535
Meeting times: Wednesdays
Places: Annick Community Centre, Irvine.
Address: 49 Belmont Road, Ayr Scotland. KA7 2PE

Backwoods BBS
Location: Inverness, North Scotland
Contact: Lewis Mackenzie
✆ +44 [0]1463 871676, 24 Hrs
WWW: http://www2.prestel.co.uk/backwoods/

Bodmin Amiga Users Klub (bauk)
Location: East Cornwall
Contact: Nick
Meeting times/places: Bodmin or Pelynt (To be arranged)
Address: Croft Cottage, Jubilee Hill Pelynt, Looe, Cornwall. PL13 2JZ

Canberra Amiga Users Society Inc
Location: Canberra, ACT, Australia
Contact: Blaz Segavac (Vice President)
✆ (02) 62571607 (AH)
WWW: http://www.spirit.net.au/~jamesm/CAUSe.html
Meeting times: 2nd Thursday of the month, 8pm.
Places: Woden Town Centre Library (Entry – The Elm Cafe).
Address: Canberra Amiga Users Society
PO Box 596, Canberra ACT, 2601, Aus.

Central Arkansas Amiga Users Group
Location: Little Rock, Arkansas
Contact: Tim Grooms
✆ 501-851-7418
WWW: http://www.concentric.net/caaug.html
Meeting Times/Places: Monthly TBA
Address: 14 Hickory Lane, Maumelle, AR 72113. USA

Club De Usuarios Amiga Zaragoza
Location: Zaragoza, Spain
Contact: Carlos Iranzo
Email: cuaz@arrakis.es or ib308295@public.ibercaja.es
WWW: http://www.biosys.net/cuaz
Meeting times: 5-8 pm Thursdays, 10:30am-2:30pm Sundays
Places: Alferez Rojas 14, 50010 Zaragoza
Address: Apdo. 246, 50001 Zaragoza, Spain

Colchester Amiga Forum
Location: Colchester, Essex
Contact: Patrick Mead
✆ 01206 212 864 (Mon-Fri Email: pjmead@Hotmail
Meeting Times/Places: TBA
Address:9 Windmill Ct, Copford, Colchester, Essex. CO6 1LH

Combat 14 Amiga User Group
Location: Northern Ireland
Contact: Jonny Drain
✆ N/A
Meeting times/places: TBA
Address: 2, Glendowan Grove, Belfast, Northern Ireland. BT17 0XE

Commodore Computer User Group Queensland
Location: Brisbane, Australia
Contact: Ronny Blake
✆ (07)32871790
WWW: http:www.powerup.com.au/~ rastlin
Meeting times:1st Tues of month, 7-9pm & 2nd Sun of month 12pm to 4pm
Places:St Laurence's College, 82 Stephens Rd, S Brisbane. Qld.
Address: 3 Conoble Court, Eagleby, Gold Coast, Queensland, 4207. Australia

Computer Club Aktief
Location: Lelystad, the Netherlands
Contact: Ji Yong Dijkhuis
✆ +31(0)320 241741 (not after 23:00)
WWW: http://mcs.nl/aktief/amiga/amiga.html
Meeting times: Mondays 19:30 till 23:00
Places: Buurthuis de Krakeling (same as the postal address)
Address: Computer Club Aktief, p/a Buurthuis de Krakeling, Fjord 155, 8224 DJ, Lelystad. NL

Computer Club Maasvogels
Location: Maastricht
Contact: Alain "D-Pal" Dassen
Email: dpal@freemail.nl
✆ +31(0)43 3471284/0660 439183
Meeting times: 2nd Sat of each month: 10.00h to 16.00h
Places: Trefcentrum Oostermaas, Edisonstraat 4, Maastricht
Address: Alain "D-Pal" Dassen. Begoniastraat 63, 6214TH Maastricht. NL

Convergence International
Location: International
Contact: Ben Clarke
Email: enquiries@convergence.eu.org
✆ 0956 985959
WWW: http://www.convergence.eu.org
Meeting times: 8pm (GMT), Wednesdays and Sundays
Places: #converge (IRCnet)
Address: 49 St. Gilberts Road, Bourne, Lincs, United Kingdom

CWCCC
Location: West Midlands
Contact: Luke Stowe
✆ 0966 467596 (after 10am)
WWW: None yet
Meeting times: 8pm-11pm
Places:Earlsdon Methodist Church
Address: 9 Trossachs Rd, Mount Nod, Coventry, CV5 7BJ

Deal Amiga Club
Location: Deal, Kent
Contact: John Worthington
✆ 01304 367 992
Meeting times: 7pm Fridays.
Places: St John Ambulance Hall, Mill Hill, Deal, Kent.
Address: 100 Trinity Place, Deal, Kent

Dublin Amiga Users Helpline
Location: Dublin, Ireland
Contact: Eddie McGrane
✆ +353-1-6210192 – Eve & Weekends
+353-1-6709332 – 8.30 -5.30 Mon to Fri.
WWW:

http://www.ireland.amiga.org/helpline.html
Meeting times: Anytime (24 hrs.)
Address: 27 St. Finians Green, Lucan, Co. Dublin, Eire

East Lanc's Amiga Club (E.L.A.C)
Location: Blacburn/W. Lanc's
Contact: Mark Lang
✆ 01254 728115
Meeting times/places: TBA
Address: 70, Tintern Crescent, Blackburn, Lancs. BB1 5RY

Emerald
Location: Northern Ireland
Contact: Charles Barr or Chris McGonagle
✆ 01504 884700
WWW:
http://www.geocities.com/Silicon Valley /Park/7401
Meeting times/places: TBA
Address: 77 St Colmans Dve, Strabane, Co. Tyrone, N Ireland

Extreme Coders
Location: Sheffield
Contact: Mark Johnston
Meeting times/Places: Contact for details
Address: 1st Floor, 145 Upperthorpe Rd, Upperthorpe, Sheffield. S6 3EB

Finnish Amiga Users Group
Location: Finland
Contact: Janne Siren
WWW: http://batman.jytol.fi/~saku/
Address: Janne Siren, Oravamaentie 2 F 17, 02750 Espoo. FINLAND

Highland Amiga User Group
Location: Highlands, Scotland
Contact: Tommy MacDonald
✆ 01667 404757 Anytime
WWW: http://azone.prohosting.com
Meeting Times/Places: TBA
Address: 7 County Cottages, Piperhill, NAIRN, Scotland. IV12 5SE

Huddersfield Amiga Users
Location: Huddersfield, W Yorks
Contact: Geoff Milnes
✆ 01484 543534
WWW:
http://www.geemil.demon.co.uk
Meeting times: 7.30pm onwards
Places:Commercial Inn, Market St,Paddock Huddersfield.
Address: 6 Ochrewell Avenue, Deighton, Huddersfield, W Yorks.

ICPUG SE Computer Club
Location: Biggin Hill, Kent
Contact: Len Beard
✆ 01689 813 616
Meeting times: Thursdays 8-10pm
Places: Biggin Hill (phone for details).
Address: 56 Rookesly Rd, Orpington, Kent. BR5 4HJ

Kickstart, Surrey Amiga User Group
Location: Surrey
Contact: Rob Gilbert
Email: gilbie@arrakis.u-net.com
✆ 01932 875336
WWW: http://www.arrakis.u-net.com
Meeting times/places: Monthly (TBA)
Address: 10 BRox Road, Ottershaw, Surrey. KT16 OHL

Knox Computer Club
Location: Galesburg, IL. USA
Contact: Mitch Durdle
WWW:
http://www.galesburg.net/~kcc
Meeting times:
First Tuesday of Month 7pm
Places: 695 N Kellogg Galesburg, IL (in the auditorium)
Address: Knox Computer Club 1003 East Fifth Ave, Monmouth, IL 61462. USA

Medway & Maidstone Amiga Collective
Location: Medway & Maidstone
Contact: David Prudence
✆ 0961 809466
Meeting times/places: TBA
Address: 34, Norman Rd, Snodland, Kent. ME6 5JD

Mutual Amiga Computer Enthusiast
Location: Beresfield, Newcastle, Australia
Contact: Ken Woodward
Email: ken@rich.com.au
✆ after working hours
Meeting times: 7pm 1st & 3rd Wednesday of month
Places: Beresfield Bowling Club.
Address: 59 Carnley Avenue, New Lambton, Newcastle, NS Wales Australia

National Capital Amiga User Group
Location: Washington D.C. USA
Contact: Fabian Jimenez
Contact by: Phone (please send us your phone number... Fabian)
✆ 301/924-0750 (10pm – 1am EST)
Meeting times: 12:00 noon EST
Places: Dolly Madison Library
Address: Fabian Jimenez, NCAUG PO Box 12360, Arlington, VA 22209 USA

No Specific Name
Location: London
Contact: Richard Chapman
✆ 0181 998 8599 5pm-8pm week, all day at weekends
Meeting times: 7pm-10pm Thurs
Place: Greenford Community Centre
Address: 96 Meadvale Road, Ealing, London, W5 1NR.

Photogenics & ImageFX Users
Location: Stanford-Le-Hope, Essex
Contact: Spencer
✆ 01375 644614 (9am-9pm)
WWW:
http://web.ukonline.co.uk/spencer.jarvis/contents.html
Meeting times/Places:TBA
Address: 44 Brampton close, Corringham
Stanford-le-Hope, Essex. SS17 7NR

Regionale Amiga Vereniging Alkmaar
Location: Alkmaar, the Netherlands
Contact: Roland de Herder
✆ +31 (0) 72 533 62 51
WWW:
http://huizen.nhkanaal.nl/~rava
Meeting times: 12 times a year
Places: Alkmaar
Address: R. de Herder, Ewislaan 35 1852 GM Heiloo, The Netherlands

Relax ITC
Location: Poland
Contact: Shandor
Email: shandor1@polbox.com
✆ +48-91-357184
Meeting times: TBA
Places: unspecified
Address: ul.Maciejewicza 1/27 71004 Szczecin 10, Poland

SEAL (South Essex Amiga Link)
Location: South Essex
Contact: Mick Sutton (sicky)
✆ 01268 761429 before 9pm
WWW: http://welcome.to/seal
Meeting times/places: various/irc
Address: n/a

SOGA – Si Otro Grupo Amiga
Location: Manresa-Torrelavega-Navarra (Spain)
Contact: Santiago GutiÈrrez CortÈs
✆ 942 888 248
WWW:
http://personal.redestb.es/sguti
Meeting times/places: TBA

South West Amiga Group
Location: South West England
Contact: Andy Mills
✆ 01275 830703 (7-10.30pm week-days, anytime weekends
Emaol: swag@wharne.u-net.com
WWW: http://www.wharne.u-net.com/swag/
Meeting Times/Places: Every 1st Thursday of the month at the Lamb & Flag, Cribbs Causeway, Bristol from 8:30pm (contact to confirm venue first)
Address: 51 Wharnecliffe Gardens, Whitchurch, Bristol. BS14 9NF

South West Amiga Group – Sydney (SWAGS)
Location: Campbelltown, Sydney, Australia
Contact: Mark Vine
✆ (02)46311801 After 7pm
WWW: None yet
Meeting times: 7pm-10pm 2nd & 4th Wed of every month
Places: Airds Community Centre, Riverside Dr, Airds
Address: 11 Kennedy Grove, Appin, N.S.W. Australia 2560

Stoke Amiga User Group
Location: Stoke on Trent, Staffs
Contact: Paul Shelley
✆ 01782 833 219
Meeting Times: 7.30pm Wednesdays
Places: Jester Public House, Biddulph Rd
Address: 19 Houldsworth Drive, Fegg Hayes, Stoke on Trent, Staffs. ST6 6TG

Stoneybridge BBS
Location: Dorset, UK.
Contact: Ozz
✆ 01202 679158 (10:30pm-6am GMT)
Address: 50 Junction Rd, Hamworthy, Poole, Dorset. (c/o NBI.UK.)

Tasmanian Commodore Users Association Inc
Location: Hobart, Australia
Contact: Eric Fillisch
✆ (018) 120 787
Meeting times: 7:30-9:30pm, 3rd Wednesday of the month
Places: Contact for address
Address: GPO Box 673, Hobart GPO TAS 7001

Team Amiga
Location: Worldwide
Contact: Gary Peake
✆ 1 281 350 2194
WWW:
http://www.wans.net/~gpeake/links.html
Meeting times: Daily
Places: All Nets and IRC
Address: 19723 Teller Blvd Spring, Texas USA 77388

The A500 /+ Users Club
Location: Hertford/Brighton
Contact: Simon (Herts) or Bob (Brighton)
✆ 01992 303524 (Herts) or 01273 439729 (Brighton – after 6pm)
Meeting times/places: TBA
Address: 52 Burnett Square, Hertford. SG14 2HB or 33 Download Court, Stonery Rd, Portslade, Brighton. BN41 2PS

The Other Realm
Location: England
Contact: Peter Luckhurst
www.geocities.com/hollywood/7440
Meeting times/places: TBA
Address: Peter Luckhurst
16 South Way, Shirley, Croydon, Surrey. CR0 8RP

The PIE BBS
Location: Dunstable, Beds
Contact: Carl Moore
✆ (01582) 606179
WWW:
www.boghole.demon.co.uk/pie/
Meeting times: 10:30pm - 7am (Call between the specified hours only, and make sure you call with ya modem!)

Tuggerah Lakes Computer Users Group
Location: Central Coast, NSW. Australia
Contact: Darrell Keirnan
Meeting Times: 1st & 3rd Thursday of every Month
Places: Berkeley Vale Public School 7.00pm
Address: PO Box 659, Toukley. NSW. Australia 2263

2260 Designs
Location: Cyberspace
Contact: Chris Korhonen
WWW:
http://www.users.zetnet.co.uk/korhonen
Meeting times: Sat-Sun 8pm
Places: irc.pureamiga.co.uk #E2260

University Place C.H. Users Group
Location: Tacoma, Washington USA
Contact: Jim McFarland
✆ (253) 265-3478 evenings
WWW:
http://www.nwlink.com/~redbeard/upchug/
Meeting times: 4th Thursday of month
Places: Fircrest Community Center, Tacoma, WA
Address: PO Box 11191, Tacoma, WA 98411-0191. USA

Virus Help Team – Norway
Location: Norway
Contact: Helge Syre
✆ +4790175626
WWW: http://home.sol.no/~syre
Address: Roeyrvikvegen 40 N-4280 SKUDENESHAVN

Waaslandia
Location: Belgium
Contact: Tony Mees
Email: waasland@glo.be
✆ +32 (0)3744 1319
WWW: http://titan.glo.be/~waasland
Meeting times: 12 meetings per year.
Places: We have 6 Amiga clubs in Belgium:- Antwerpen; Merksem; Aalst; Mechelen; Turnhout; St-Niklaas
Address: Lepelstraat 11, 9140 Steendorp

West London Computer Club
Location: West London
Contact: Alan Paynter
✆ 0181-932-1856
Meeting times:1st and 3rd Tues of month
Places: Duke Of York Public House
Address: 19 Harlech Tower, Park Rd East, Acton, London, W3 8TZ

Wigan/West Lancs Amiga User Group
Location: Wigan/W Lancashire
Contact: Simon Brown/Ralph Twiss
Email: ssamiga@warp.co.uk
✆ Simon; 01257 402201 or Ralph; 01695 623865
WWW:
http://www.warp.co.uk/~ssamiga
Meeting Places:St Thomas the Martyr School Hall, Highgate Road, Up Holland, Lancs
Address: 79 Woodnook Road, Appley Bridge, Wigan, WN6 9JR & 32 Higher Lane, Up Holland, West Lancs

XCAD User
Location: N Ireland
Contact: Tony McGartland
✆ 01662 250320 (after 6pm)
Meeting Times/Places: TBA
Address: 11 Lammy Drive, Omagh, Co Tyrone BT78 5JB

Title	Description	Price	Compatibility
Player Manager2 EXTRA	Management & Arcade Action	£6.99	AGA AMIGA'S
Mega BLAST!	Blitz Bombers / Bomber man clone	£7.99	ANY AMIGA
Pinball Illusions	Fun, Fun, Fun!	£6.99	AGA AMIGA'S
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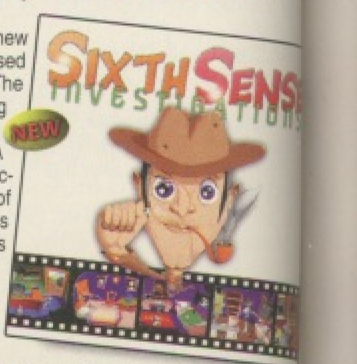
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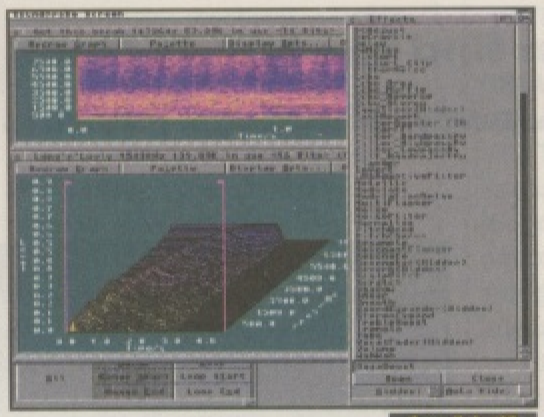
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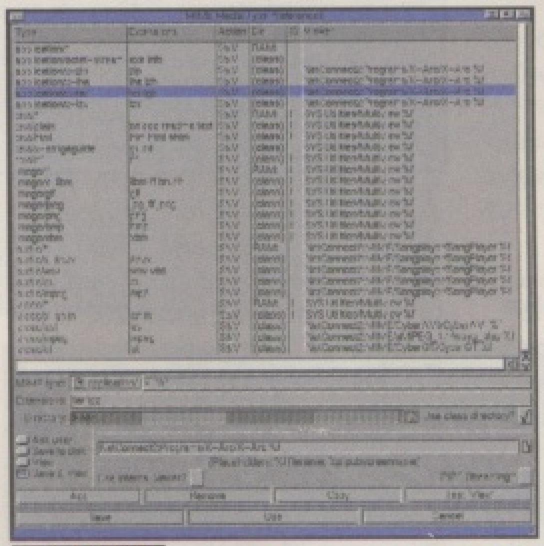
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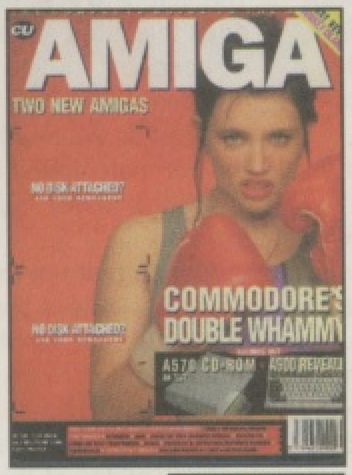
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Amiga C Programming

Buried deep down in the heart of the Amiga's Operating System you can find the handy Hook feature (but sadly no Peter Pan). Jason Hulance reveals all...

PART 15

This month we're going to look at improving the file lister by distinguishing files from directories. That way we'll be a step closer to a useful file requester.

However, the main topic for this month is the 'Hook' feature of a number of parts of the AmigaOS. We'll see how this is related to our file lister after we've built some foundations.

File or directory?

The first step is to get ExAll() to return slightly more information about each directory entry than just its name. What we need is the type of the entry: file or directory.

This is a simple change: instead of using 'ED_NAME' with ExAll(), we'll use 'ED_TYPE'. Take a look at the new version of the fillList() function in the first example, 'hook0.c'.

By specifying 'ED_TYPE', the 'ed_Type' field of the 'struct ExAllData' buffer will now be valid and can be read. If it's greater than zero then the entry is a directory. Otherwise it's a plain file.

This new information can now be passed to a slightly modified version of addNode() that records the status of the directory entry in the nodes that we're collecting (see Example 1).

The status is passed to addNode() as a new boolean parameter, 'isdir' (see Example 2). This is stored in the node as the 'ln_Type'.

In general we can use the 'ln_Type' field of our nodes for whatever we like (although it's only an 'unsigned char'). Having said that, we really ought to abide by the guidelines and use recognisably non-system values.

That's what the constants 'MY_FILE' and 'MY_DIR' are all about: user values for 'ln_Type' start at 'NT_USER' and grow downwards (so you didn't ought to have more than about 200!).

Example 1

```
/* Run through a buffer load of entries */
struct ExAllData* ead = EABuff;
while(ead)
{
   /* If ed_Type>0 then it's a directory */
   addNode(ead->ed_Name, ead->ed_Type > 0);
   ead = ead->ed_Next;
}
```

Directory order

So, now we know what type each directory entry is we can fiddle the sort order so that we group directories together (at the top). The standard ASL file requester does this, so it should be a familiar concept.

Remarkably, this is a very trivial change: all we need to do is alter the compareNode() function to check the nodes' types first (see Example 3).

Notice that the three types of return value (less than zero, zero, or greater than zero) that this function must make can be calculated by a simple subtraction of the type values.

The validity of this subtraction is extremely subtle in several respects. First, the result of subtracting the two 'unsigned char' values is (on pretty much all ANSI C compilers) an 'int', and these two operands are automatically upgraded to 'int' before the subtraction is done.

The 'int' type is signed, so it can handle a subtraction that gives a negative result. If this calculation were performed with unsigned values, we would never get a negative return value, so compareNode() would really mess up our sorting! (It would, in fact, be invalid.)

The second subtlety is that the subtraction can be performed without causing overflow, since the operands have been implicitly cast to 'int' and this has a much greater range (on the Amiga) than 'unsigned char'.

In general, you would really need to do two comparisons (greater than, or less than each other) to validly order the two elements.

Hooking into the ListView

Ordering the directories before the files is a useful way of separating the directory entries, but the current display does not otherwise visually distinguish between them.

If you examine the standard ASL file requester you'll notice that it marks directories by drawing them in a different colour (the standard Amiga setup has directories as white text and files as black).

The only way we currently have to do something like this is to use a custom rendering routine for the ListView. To do this we need to write a 'hook' function.

The second example, 'hook1.c', starts us off on this path by creating and using a very basic hook (based on official code). Example 4 is a snippet

Example 2

```
/* Constants for the Node type, deciding dir or file */

#define MY_FILE   (NT_USER)
#define MY_DIR    (NT_USER-1)

void addNode(char* name, int isdir)
{
  if(name)
  {
    struct Node* node = AllocVec(sizeof(struct Node),
                                 MEMF_PUBLIC | MEMF_CLEAR);
    if(node)
    {
      if(node->ln_Name = AllocVec(strlen(name)+1,
                                  MEMF_PUBLIC))
        strcpy(node->ln_Name, name);
      node->ln_Type = (isdir ? MY_DIR : MY_FILE);
      AddTail(&mylist, node);
      mycount++;
    }
  }
}
```

Example 3

```
int compareNode(const void* a, const void* b)
{
  struct Node** na = (struct Node**)a;
  struct Node** nb = (struct Node**)b;
  /* Check the node types first */
  int diff = (*na)->ln_Type - (*nb)->ln_Type;
  if(diff)
    return diff;
  else
   return stricmp((*na)->ln_Name, (*nb)->ln_Name);
}
```

Overflow

This happens when an operation (usually arithmetic) exceeds the range of values that can fit in a type. The most obvious example is subtracting a large positive value from a large negative one. The result is (by and large) unspecified by the C standard, so a compiler can generate code that does anything (it may even cause a crash or terminate the program). So, you're best to avoid running into it at all costs.

from the setupWindow() function. This shows the small amount of code needed to make the ListView use our hook (or 'callback').

Of course, because we will be doing some drawing our program also needs to open and manage the Graphics library, in the normal way.

Example 4

```
struct Hook renderHook;
renderHook.h_Entry =
(HOOKFUNC)RenderHook;

/* ...Rest of gadget cre-
ation code... */

/* Now create it and add
it to our list */
if(listgad=CreateGadget(L
ISTVIEW_KIND,listgad,&new
gad,

GTLV_Labels,   &mylist,

GTLV_CallBack,&renderHook
,

TAG_DONE))
  createWindow(glist);
else
  printf("Error: could
not create gadget(s)\n");
```

The hook function

The main part of the hook function is shown in Example 5. It has to be marked with compiler-specific modifiers (like '__saveds') in the same way as we've seen before. (In fact, this code is for StormC; if you're using SAS/C, you'll need to add '__asm' after the '__saveds'.)

The first thing this hook function must do is check the 'lvdm_MethodID' to make sure it responds to only 'LV_DRAW' messages, even if it was called with another one. Therefore, all other messages should be ignored, enabling future extensions to safely use this same mechanism.

The next thing to do is to extract some useful information from the draw message, like the target rastport and the screen pens. The drawing mode and pens can then be set to their normal values.

The omitted section (just before the actual rendering) deals with calculating where exactly to draw the text of the node, and how much of it will fit on the display. This code is shown in Example 6.

All the hard work is done by the TextFit() function. It returns the number of characters of the node name that will fit into the space indicated by the last two parameters (which use the 'lvdm_Bounds' element of the draw message).

Note that we'll be putting a 2-pixel boundary on the left and right, hence the final subtraction in the width calculation.

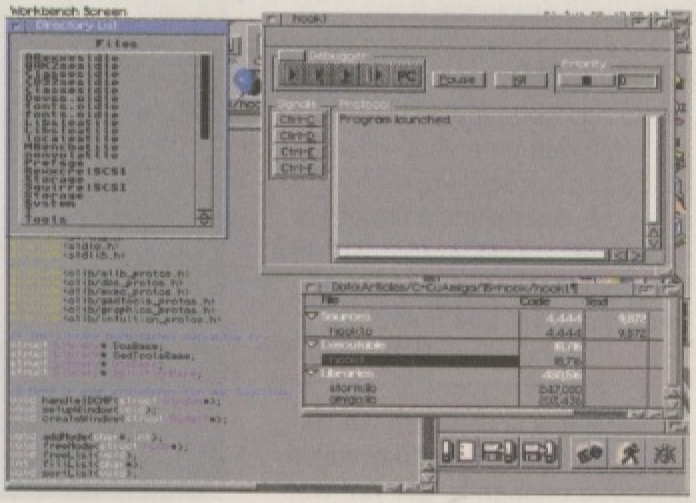
The TextFit() function also fills in the 'extent' structure to show how much space will actually be taken up by the node name. The remaining calculations use this (together with the 'lvdm_Bounds') to centre the text vertically in its slot.

Hook

Peter Pan's enemy, but the Amiga programmer's friend. This is a fairly generic (and portable) way in which the guts of the AmigaOS can make use of user- supplied code, usually for customisation of standard OS features. The main benefit of this mechanism is that it can allow a variety of programming languages to be used. Without this, you might reasonably expect customisation routines to have to be written (carefully) in Assembly.

Pen Array

To enable the user to customise their interface, the pen numbers used by Intuition are not fixed. Instead it records them indirectly through its own pen array. For example, the normal foreground pen colour is taken from the 'TEXTPEN' element of this array and the background from 'BACKGROUNDPEN'. Other elements include 'HIGHLIGHTTEXTPEN', 'FILLTEXTPEN' and 'FILLPEN'. The user can specify which pens Workbench uses for the various parts of the GUI using the Palette preferences program.



Oops! The 'le' from 'nonvolatile' has spread itself all over.

Example 5

```
/* Our code which will draw each node */
static ULONG __saveds
    RenderHook(register __a1 struct LVDrawMsg* msg,
               register __a2 struct Node* node)
{
  struct RastPort* rp;
  UWORD* pens;
  STRPTR name;
  ULONG fit;
  WORD x,y;

  if (msg->lvdm_MethodID != LV_DRAW)
    return LVCB_UNKNOWN;

  /* Extract the RastPort and Pen info from the msg */
  rp = msg->lvdm_RastPort;
  pens = msg->lvdm_DrawInfo->dri_Pens;

  /* Setup the normal fore- and back-ground colours */
  SetABPenDrMd(rp, pens[TEXTPEN],
                   pens[BACKGROUNDPEN], JAM2);

  name = node->ln_Name;

  /* ...Code to calculate x and y position,    */
  /*    and how much of name actually fits... */

  /* Finally, draw the item */
  Move(rp,x,y);
  Text(rp,name,fit);

  return LVCB_OK;
}
```

Example 7

```
UBYTE state;

/* Setup the fore- and
back-ground colours    */
/* according to whether
the item is selected */
state = msg->lvdm_State;
if(state == LVR_NORMAL)
{
  apen = pens[node-
>ln_Type == MY_DIR ?
HIGHLIGHTTEXTPEN :
TEXTPEN];
  bpen = pens[BACKGROUND-
PEN];
}
else
{
  apen = pens[node-
>ln_Type == MY_DIR ?
BACKGROUNDPEN : FILL-
TEXTPEN];
  bpen = pens[FILLPEN];
}
SetABPenDrMd(rp,apen,bpen
,JAM2);
```

Colouring

If you run this example you'll see that we've not really improved things. The nodes are still coloured the same. Actually, you might notice that we've introduced a couple of problems: clicking on an item does not visually select it and long text is not overwritten by other items. You'll see this latter error if you scroll the list up and down carefully. (One of the screenshots shows the mess too.)

Our final example, 'hook2.c', fixes these problems. Example 7 shows the extra code needed to colour directories and selected items. The 'state' is 'LVR_NORMAL' for unselected items, and the 'node' can be examined to decide if it's for a directory or a file.

The next fix is to draw the remaining part of the display slot in the background colour to remove any extraneous text from earlier renders in this slot.

Example 8 shows the additional code which is used after the Text() call in the hook function. It makes use of the (very general) FillOldExtent() function, which is shown in Example 9.

That's it!

We're still quite a way from having a file requester, but we've made some good steps forward. Even the last example is not yet complete: we ought to deal with the case that the ListView has been disabled. See if you can work out what you might need to do for that.

Sadly this is as far as we can take this series. Hopefully we've achieved enough to get you well on the way to some serious C programming. We'd definitely advise you get hold of the official Rom Kernel Reference Manuals. They are on the 1.2 version of the Amiga Developer's CD in AmigaGuide format. The Amiga C Mailing List is also worth subscribing to. See www.azstarnet.com/~midian/amiga/c.html for details. Remember, the Amiga needs coders like you! ■

Jason Hulance

Example 6

```
WORD slack;
struct TextExtent extent;

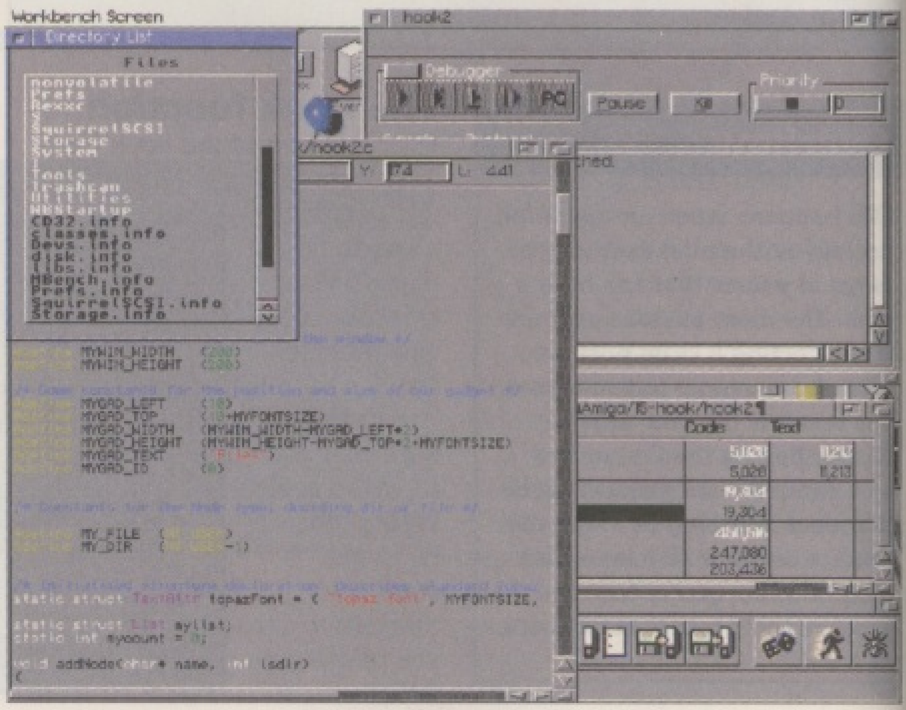
/* Calculate how much of the name will */
/* fit, and how big it is              */
fit =
  TextFit(rp, name, strlen(name), &extent, NULL, 1,
    msg->lvdm_Bounds.MaxX-msg->lvdm_Bounds.MinX-3,
    msg->lvdm_Bounds.MaxY-msg->lvdm_Bounds.MinY+1);

/* How much taller is the target area? */
slack =
  (msg->lvdm_Bounds.MaxY - msg->lvdm_Bounds.MinY) -
  (extent.te_Extent.MaxY - extent.te_Extent.MinY);

/* Put it on the left and vertically centred */
x = msg->lvdm_Bounds.MinX-extent.te_Extent.MinX+2;
y = msg->lvdm_Bounds.MinY-extent.te_Extent.MinY+
    ((slack+1)/2);
```

Example 8

```
/* Draw the blank part of the target area, too */
extent.te_Extent.MinX += x;
extent.te_Extent.MaxX += x;
extent.te_Extent.MinY += y;
extent.te_Extent.MaxY += y;
SetAPen(rp,bpen);
FillOldExtent(rp, &msg->lvdm_Bounds,
                  &extent.te_Extent);
```



▲ The fixed version, with nice colouring on directories.

Example 9

```
/* Erase any part of "oldExtent"       */
/* which is not covered by "newExtent" */
void FillOldExtent(struct RastPort* rp,
                   struct Rectangle* oldExtent,
                   struct Rectangle* newExtent)
{
  if(oldExtent->MinX < newExtent->MinX)
    RectFill(rp,oldExtent->MinX,
             oldExtent->MinY,
             newExtent->MinX-1,
             oldExtent->MaxY);

  if(oldExtent->MaxX > newExtent->MaxX)
    RectFill(rp,newExtent->MaxX+1,
             oldExtent->MinY,
             oldExtent->MaxX,
             oldExtent->MaxY);

  if(oldExtent->MaxY > newExtent->MaxY)
    RectFill(rp,oldExtent->MinX,
             newExtent->MaxY+1,
             oldExtent->MaxX,
             oldExtent->MaxY);

  if(oldExtent->MinY < newExtent->MinY)
    RectFill(rp,oldExtent->MinX,
             oldExtent->MinY,
             oldExtent->MaxX,
             newExtent->MinY-1);
}
```

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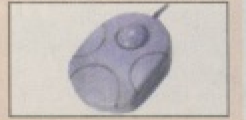
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Sound Lab

In this, the last issue of CU Amiga, Dhomas Trenn takes a look into the future to see what audio developments are in the pipeline.

The ARTAS project

A new retargetable audio system is in development that already has support from many Amiga audio developers. In fact the Amiga ReTargetable Audio System (ARTAS) is not specifically an audio system as its name implies. It's a system designed to efficiently process data streams of any size or kind (audio, MIDI, video, etc). To ensure accuracy, it incorporates an external sync timing system, driven by the timer.device on existing Amigas or soundcard resources on future systems.

The philosophy enables you to use plug-in modules or drivers to invisibly make use of available hardware. These drivers would give ARTAS access to MIDI hardware for MIDI data, soundcards for audio playback etc and all based on your personal preferences. If a driver is not available for a particular process (say you want to playback an MPEG audio file, but you do not have MPEG specific playback hardware) ARTAS will find the required module to give you the best possible playback quality.

From a programmer's point of view, the task of supporting multiple hardware will no longer be a concern.

Delfina

Petsoff Limited Partnership continue to expand their line of Delfina audio cards. Soon to be released is the DelfExp expansion (a serial port) with up to 625 kbps throughput, and the A1200 Delfina internal sound card. Also planned are a digital (SP/DIF) input/output expansion for the Delfina Lite and a new Delfina Pro sound card. The DelFX software allows you to redirect audio streams through the card's DSP effects, such as to apply real-time effects to any AHI sound source, or to redirect incoming sounds with applied effects to any AHI program. This 'sound piping' will be greatly improved with the Delfina Pro, where modular sound effects processing is planned – just what's needed. Jyrki Petsalo of PLP, indicated that they are also working on the possibility of some special features for the Delfina sound cards when used with the upcoming ProStationAudio software. Soon to come, as well, is a long awaited hardware based MPEG layer 3 player for all Delfina sound cards.

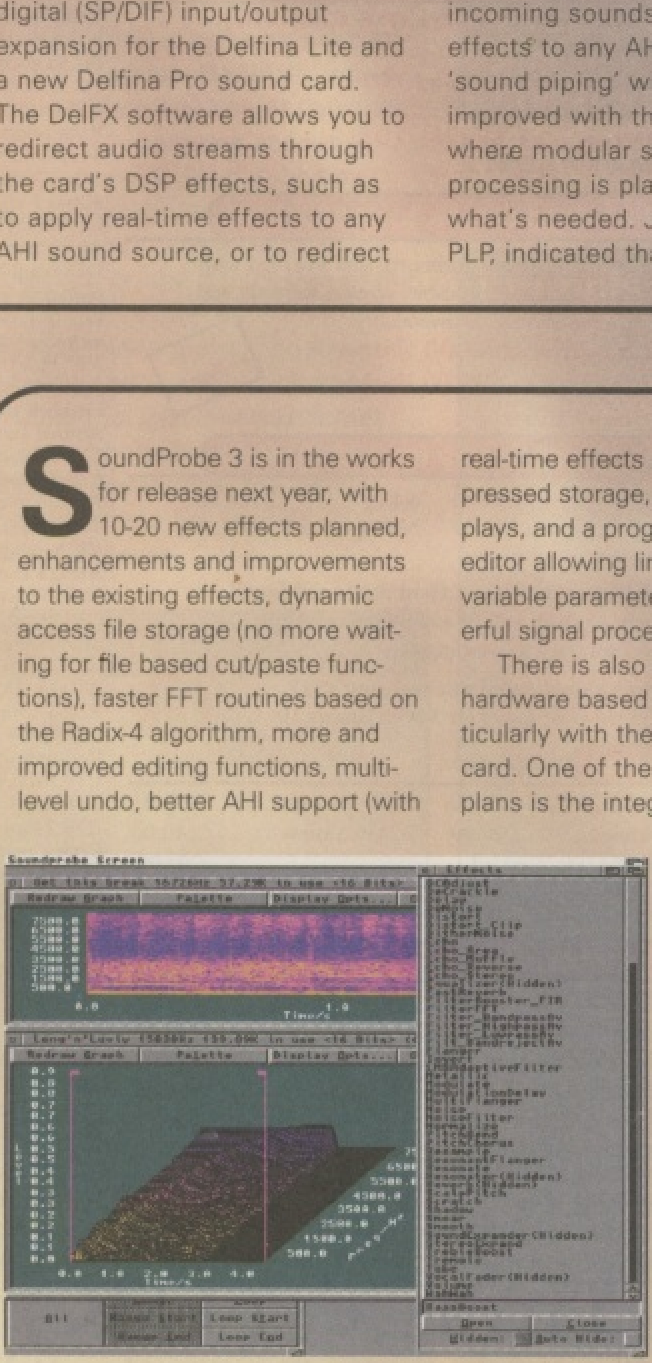
ProStationAudio

Details of the forthcoming ProStationAudio (multi-track digital audio editing system) from AudioLabs are still scarce, but here is a little of what you can expect. ProStationAudio will offer a multitrack, region-based, visual time-line editor (grab and drag objects to fade in, out, cross-fade, trim, etc.) and a fully automated mixing console with multiple DSP inserts and sends per track. Automation tracks can be graphically edited on the time-line, superimposed to audio waveforms, or operate on-the-fly though the mixing console. With support for the 'Alps' system you can expand ProStationAudio just by adding new plug-ins. Alps plug-ins can process tracks in real-time and react in real-time to parameter variations. Using both DSP inserts and DSP sends you can build complex serial/parallel networks of DSP algorithms that work in real-time. Got that?

SoundProbe

SoundProbe 3 is in the works for release next year, with 10-20 new effects planned, enhancements and improvements to the existing effects, dynamic access file storage (no more waiting for file based cut/paste functions), faster FFT routines based on the Radix-4 algorithm, more and improved editing functions, multi-level undo, better AHI support (with real-time effects processing), compressed storage, new graphical displays, and a programmable effects editor allowing linked effects with variable parameters for more powerful signal processing.

There is also the possibility of hardware based DSP effects, particularly with the Aura16 sound card. One of the more exciting plans is the integration of SoundProbe with Stefan Kost's shareware program SoundF, so that the two programs can be used side-by-side. They are also planning a common plug-in format so that effects interchange between the two. These are the top Amiga sound editors and a merging of the two would be a much appreciated achievement. A PPC version of SoundProbe is also under consideration, and if/when the next generation Amigas appear, expect to find SoundProbe among the first available programs. For those of you venturing elsewhere, SoundProbe apparently works under the Amiga Forever emulator, with just a few minor problems. Upcoming AHI support for UAE will mean that SoundProbe should be able to output directly to PC sound cards. If not, direct PC sound card plug-ins are also being considered.

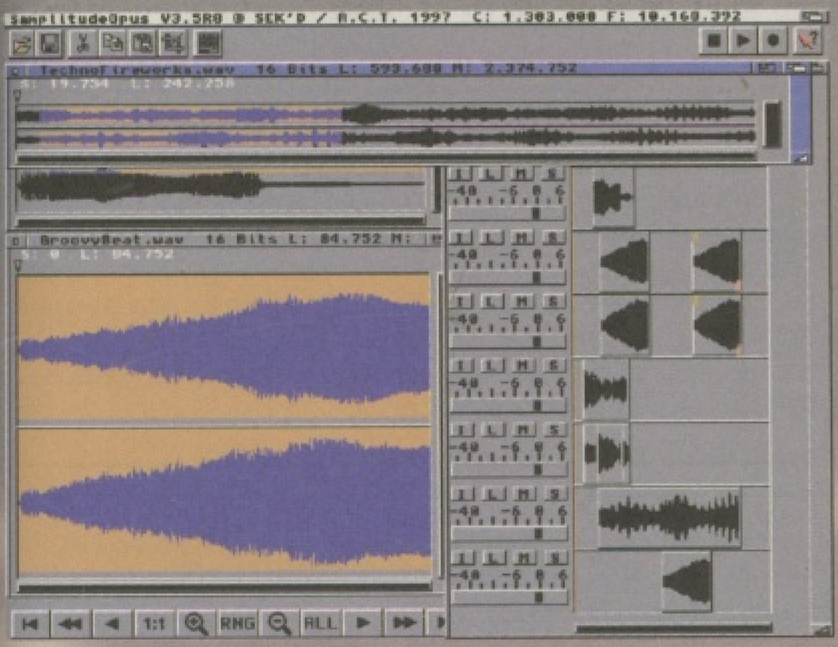


While HiSoft Systems have just released SoundProbe 2, they do not have any immediate plans for new audio products. David Link promises that HiSoft will continue to support all of their music products (ProMIDI, Megalosound, Aura, SoundProbe etc.) so long as there is demand.

Samplitude & Prelude

A.C.T. Germany are continuing to invest both time and money into development of Amiga hardware and software products. Marc Albrecht says they will continue to concentrate on their existing products, but also have some new ones coming soon.

Expansion modules for the Prelude sound card are on the way, including the Rombler which will allow you to use any WaveBlaster compatible wavetable board (such as the Roland SCB-55 and Yamaha DB50XG) with your Amiga. Also soon to come for the Prelude are an MPEG audio decoder and an SP/DIF digital I/O interface. Particularly exciting will be a new Zorro III, 24 bit, 96 kHz, 12 channel (6 in – 6 out), expandable audio card called the Festiva.



Also, a19" rackmount device called the MIDI-PortAl will offer up to 3 MIDI units each with 3 out, 1 in and 1 through, giving you access to a possible 48 MIDI channels with compatible MIDI software.

For audio CD production, be sure to check out Melting Music for details of an as yet unnamed musical workstation that will be everything you need to take a professional audio project from start to finish. It will come in three forms: a tower workstation, a 19" rackmount version and a hardware/software bundle. The workstations will include a CD-ROM writer, MIDI interface and hard disk recording system all built-in. All hardware and software will be fully compatible with their soon to be released (freeware) ARTAS project.

Samplitude Opus author Thomas Wenzel is also working on the ARTAS project and says that Samplitude Opus 4.0 will be completely based on it. His immediate plans for Samplitude are to move some of the internal effects routines into loadable plug-ins and also to add some new ones. Once ARTAS is available, Thomas will begin work on the successor to Play16, a new multi-format sound player based on the ARTAS system. Further improvements are in the works for AmigaAMP, an MPEG 3 song player, with plans to re-write the loader/decoder routines to give better multi-tasking performance and also to improve the playlist editor.

AHI

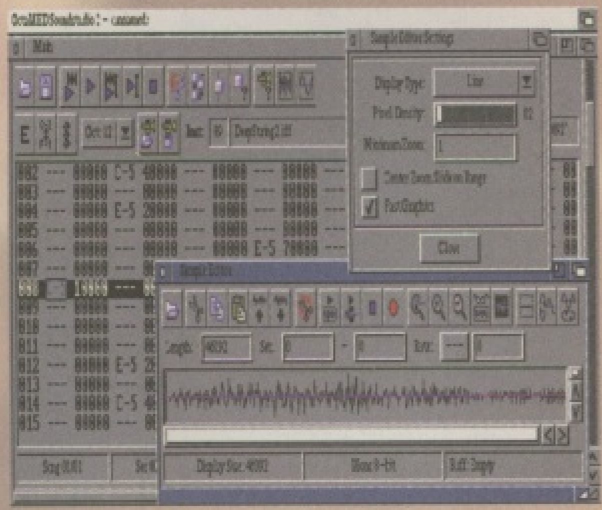
AHI's Martin Blom is optimistic about his plans for the Amiga, with hopes of a PPC accelerator board and next generation Amiga developer system in his future. Development has been restarted on the much delayed PPC version of AHI. AHI version 5 is in the design stages, but high expectations of the new ARTAS standard may or may not see its release. Whatever happens though, the AHI source code will be released either as part of version 5 or in its current state. If ARTAS is a hit with the developer community, as it is expected to be, efforts will be made to allow old AHI programs to work with this new system. Perhaps little known, is that AHI was originally designed with Martin's dream of a new high-end sound card in mind – with lots of local memory, a very fast DSP and high quality AD/DA convertors. Martin has also been asked to port parts of AHI to BeOS; work, that would most certainly benefit any Amiga version, too.

young monkey

Young monkey studios will continue with their development of MIDI software offerings. Upcoming is a program called MSE-Snapshot, with which you can define a project (song) and assign MIDI devices to it. Then, with a click of a button, MSE-Snapshot will retrieve all MIDI data from the associated devices. To recreate the song setup, select an existing project and let the program do all the work for you. Development of MIDI SYStem EXplorer (MSE) will continue, including added support for the new ARTAS project when it becomes publicly available.

OctaMED SoundStudio

Since being officially shelved by its original developers, OctaMED SoundStudio has recently been put back into development via a third party. The core of the program is being rewritten so as to be audio hardware independent with a system of plug-ins to allow specific sound cards to be used to their full potential. The interface is getting a facelift which will see the end of fixed-size windows and problems with graphics cards. It's still quite a way from completion but is shaping up to be a worthy successor to the current release. As you might expect, it won't be available for 68000 users (020 minimum). More info can be gleaned from the OctaMED web site: www.octamed.co.uk



Further Information

A.C.T. Germany
www: act-net.com/
email: albrecht@act-net.com

Audio Labs
www: audiolabs.it/
email: info@audiolabs.it

David O'Reilly
www:york.ac.uk/~djor100/sprobe.htm
email: djor100@york.ac.uk

Dissidents
www: www.dissidents.com/
email: upport@dissidents.com

HiSoft Systems www:
www.hisoft.co.uk/ email:
support@hisoft.co.uk

Kenny Nilsen
www: youngmonkey.ca/hands/files/Sunrize/index.html
email: kenny@bgnett.no

Martin Blom
www: lysator.liu.se/~lcs/ahi.html
email: lcs@lysator.liu.se

Petsoff Limited Partnership
www:sci.fi/~petsoff/
email: petsoff@sci.fi

RBF Software
www:octamed.co.uk/amiga.html
email: rbfsoft@cix.compulink.co.uk

Richard Koerber
www: shredzone.home.pages.de/ email:
Richard.Koerber@koeln.netsurf.de

Thomas Wenzel
www: linux.rz.fh-hannover.de/~wenzel/
email: wenzel@unixserv.rz.fh-hannover.de

young monkey studios
www: youngmonkey.ca/
email: dhomas@youngmonkey.ca

Emulation: New Horizons on Gaming

PART 4

Tired of hearing about the same old emulators? Interminable versions of Speccy simulators got you down? Jason Compton's investigation of some of the fresher faces should be just the job.

If I ever became a Professor of Emulators, I'd be the sort that preached the classics to my charges: Spectrum, C64, Apple emulation and the like. But new developments are just as important, if not moreso – after all, where else would we get more classics from? Avid gamers have mostly had to haunt the classics to get their thrills: the 8-bit computers and consoles. But new developments around the world have started to bring advanced platforms to Amiga gamers, and even crusty old professors can't help but take notice.

Ports of Call

A number of arenas of software development have been benefitting recently from the ability to port code from other platforms. That's why we have Quake, will soon have the Opera and Mozilla web browsers, and can avail ourselves of one of many, many freeware Unix programs. Emulation fans have come out winners in recent times as well, with many of the new emulators being based in part or in full on work being done for other platforms.

The positive result is that we get emulators that we would not see for a long while, or ever, on the Amiga with a relatively small amount of work on the part of the porting programmer. The negative side is that since the code has been written in a portable language – usually C – it's not as fast or efficient as it might have been if it was built from the ground up by an Amiga programmer using large amounts of assembly code. So, while we do get the emulators we want, we need faster machines to run them than probably would have been the case if the emulator was a 100% Amiga assembly effort. The benefits of actually having access to these wonderful new programs tends to outweigh the inconvenience of expanded executable size additional overhead.

Coin-free Arcade

Arcade machines are computers too. They're in big cases and they have loud speakers and you have to put coins in them to run their programs, but at the root of the matter, they're not very different from your Amiga. Many arcade machines share common hardware but simply use different ROM chips for different games. After emulation programmers had conquered most of the tough computer and console nuts, they turned their sights on arcade machines. The result? An arcade machine that looks just like your Amiga!

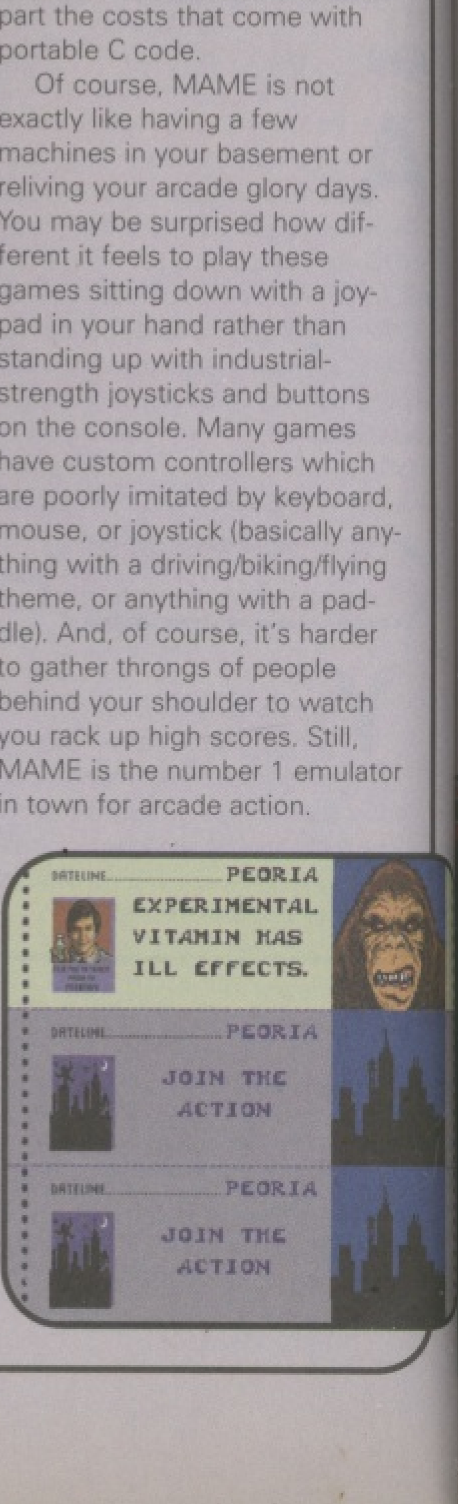
The ultimate expression of arcade emulation (and perhaps the most monumental undertaking for any emulation) is MAME, the Multi Arcade Machine Emulator. On the one hand, MAME is blatant bloatware. It is a single program whose express goal is to emulate, within one single program, as many different types of arcade game as possible. This leads to an executable size which, at last count, reaches nearly 7MB on the Amiga (for the PPC version). Some emulations require literally dozens of MBs of memory to launch. It's almost enough to make you sick.

Ah, but the games you can play! MAME supports hundreds of arcade classics, and more are added with every (rather frequent) update. Amiga MAME is usually a revision or two behind the pace set on other platforms, but that's generally not too bad – it gives everyone a chance to catch up, and upgrade their hardware, since MAME is progressing rapidly from the primitive Pac Man-esque machines of the distant past to the beefier hardware of the late '80s and beyond – the sort of custom hardware that isn't nearly as easy to emulate.

MAME also has certain economies of scale. Because all emulators run more or less the same, there is only one set of directories you need to keep, only one interface GUI you need to learn, and only one set of in-game keys (like coin insert and start) that you need to remember. Plus, the MAME system provides would-be emulator programmers with a front-end that's already given – all they need to do is provide an emulation module that conforms to the MAME standards. To date, dozens of programmers have contributed to the MAME project, and it's not too hard to imagine that they would not have been nearly as productive on their own.

MAME versions exist for the 030, 040, 060, and PPC (PowerUP software). Of these, the 030 version can be solidly considered unusable (unless you don't mind waiting a few minutes between frames). Fast 040 and 060 users can expect good frame rate performance on a number of older games, but it greatly helps matters if you're willing to forego sound. And for some new games, even PPC owners will find themselves getting less than optimal framerates – in part a testament to all that hardware being emulated, and in part the costs that come with portable C code.

Of course, MAME is not exactly like having a few machines in your basement or reliving your arcade glory days. You may be surprised how different it feels to play these games sitting down with a joypad in your hand rather than standing up with industrial-strength joysticks and buttons on the console. Many games have custom controllers which are poorly imitated by keyboard, mouse, or joystick (basically anything with a driving/biking/flying theme, or anything with a paddle). And, of course, it's harder to gather throngs of people behind your shoulder to watch you rack up high scores. Still, MAME is the number 1 emulator in town for arcade action.



Another fine MESS

The MAME team has provided a very good example of how to successfully bring a lot of emulation power together for one directed effort. A new project, dubbed MESS (Multi-Emulator Super System) looks to stand on the shoulders of the MAME giants and do for computers and consoles what their predecessors did for arcade games. In the not too distant future, emulators may fall under two headings: MAME for arcades and MESS for "everything else."

The number 1 reason for investigating MESS is that it's presently the only Amiga way to get one of the emulation Holy Grails: Sega Megadrive/Genesis emulation. It's incomplete, as is MESS in just its first release, but it does work for some titles. Speed is pretty hard to come by at this point. The only port of MESS is to the PPC – it seems it's not worth porting the code to anything slower.

Presently, MESS emulates a rather eclectic group of machines. The Megadrive emulation is the eye-catcher, but with limited functionality it's not the star. That would be the very solid (and far more compatible than other Amiga alternatives) NES module. Rounding off the group are the Colour Genie, the TRS-80 and the Colecovision, all three machines of which either unpolished or no emulators exist for the Amiga. Future versions promise to emulate a whole host of new machines – such esoteric favourites as the Vectrex and Bally Astrocade, along with the Atari 800, Apple II, PDP-1 and Kaypro CP/M machines. No word yet on when, or if, they'll up the stakes and work on more modern emulations any time soon.

MESS is functionally a near dead-ringer for MAME, with very similar configuration and operation. The Amiga MESS port is a little less polished than the MAME port, meaning you have to rely more on CLI options than the GUI. The Genesis emulation is extremely promising but alas, speed and compatibility truly bog it down.

But MESS is in its very first version – both its first general release and its first Amiga port – and it's definitely going to be fun to watch.





Flying Raccoon Suits

Excuse me, sir, would you like a Super Famicom (SNES) emulator with dinner? You bet I would! Coming to the Amiga in both 68000 and PPC (WarpUP) formats, SNES9X provides the first solid emulation for that machine. Serious development only very recently stopped for this console – in America, Nintendo used the "Who needs a new machine?" slogan to push SNES Killer Instinct while Sony and Sega released their 32-bit CD consoles, right up until the release of N64, when they answered their own question. So, there's a lot of pressing value in being able to recreate a SNES console on your own system.

The ports are still in progress: the SNES' 16-bit mode is not supported, meaning that all games are rendered down to a rather funky 256 color palette. Sound is similarly missing, and certain modes and add-on FX chips are not yet implemented.

As for speed, only serious entrants need apply – even powerful PPC systems can't squeeze out a 100% matched framerate. With a couple of frameskips, 060 users can comfortably explore the SNES back catalogue with abandon.

A CD32 joypad is highly recommended, as the two are nearly identical (SNES has one extra button).





Future Times

The future looks to be quite promising for gamers. As the kinks get worked out of all of these emulators, we should have more opportunities to rediscover old favourites on our own desktops. And then there are the still unexplored realms. A very preliminary PlayStation emulator is under development, presently running as one big debug mode. Reports of some extremely basic (and extremely slow on 060s) functionality have begun to trickle out, but it's clear that the average system is not up to such a task. MAME and MESS seem to grow like clockwork, and the buzz is that PPC Mac and PC emulators are around the corner, thus giving us the ability to run more, faster PC and Mac games. So, for the tortured souls who feel that there's nothing quite like gaming with a little emulation overhead, take heart – we're in the middle of some tremendous growth in opportunities!



Surf's Up!

Catch up on all the latest Amiga Net news and gossip, and all rise for NetGod's final sermon.

NetGod speaks...

In the past month, two major software packages that I use have been cracked by hackers. While claiming all sorts of justification for their actions, these groups are worse than parasites. At least a parasite allows its host to go on living, but these hacking groups are likely to kill the software market they pretend to care about.

Developers of both hacked programs have said they are considering ceasing development since they can't earn a living when their work is being continually stolen. Even if they continue, they will have to divert resources to improving copy protection, instead of improving the product's features. It's not just the author they are stealing from, if you have paid for your copy of the software, you could be losing out on future developments.

These cracked programs don't always work exactly as the proper version, they have a tendency to crash the machine, behave oddly or do other damage. It's no more than the user deserves for receiving stolen goods.

It may be easier to distribute illegal software over the Internet, but that doesn't make it right. Many ISPs take a dim view of their service being used for illegal purposes. If you see a source of illicit software, inform the authors and, where possible, the ISP. It's you, the honest buyers of software, who will be the real losers. The authors can move on and earn a living elsewhere, you will be the one stuck without updates. Think about it.

Last month saw the eventual release of NetConnect 2 and we should be getting the first glimpse of Miami Deluxe this month. This long awaited upgrade will add many new features, giving it similar capabilities to Genesis. It's too soon to say which will be best (I doubt there will be that much in it) but it will be good to have a choice of two TCP stacks that are full-featured, easy to setup and actively supported by their authors. It looks like a healthy competition is developing between the authors of Genesis and Miami, which can only lead to better programs for all of us.

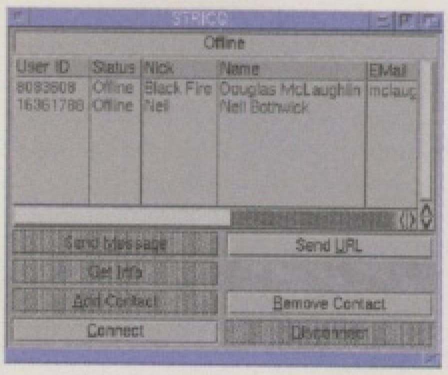


New news reader

Miami is of course different to NetConnect in that it is only a TCP stack. It will get you online but you will need additional software to do anything. Fortunately, the Amiga's Internet software market appears pretty healthy.

Along with updates to all three browsers, the last few weeks have seen the release of a brand new news reader called NewsRog. Despite the rather unusual name, this is a very professional package with a wide range of features and extensive documentation and tutorials. We've sneaked in a review of it on page 56. Also check out the demo version included on this month's CD.





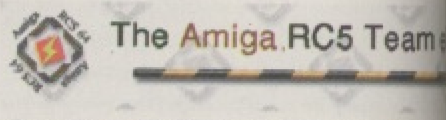
ICQ

Despite the failure of recent negotiations with Mirabilis to officially port ICQ to the Amiga, there have been a few Amiga versions released recently, the most complete of which is STRICQ. The problem was that Mirabilis wouldn't release details of the ICQ protocols, but some enterprising individuals have reverse engineered them by monitoring the data on an ICQ connection. Although no code has been stolen, this is still of dubious legality, so there's no copy of it on the CD. For those that have been in hiding all year, ICQ (pronounced I-Seek-You) is a means of communicating with other people by notifying them when you are online, although it does a lot more besides. It is time that Mirabilis realised that the Internet is not for PCs only, and that users of alternative computers may want to communicate with the PC owners currently using their system.



AmiBench

AmiBench have reported some very impressive statistics for their site. After a period of falling interest, they have just reported receiving more than 300,000 hits in less than a year, getting on for 600 per day. AmiBench has been mentioned several times in Surf of the Month, it is well worth visiting if you have Amiga gear to buy or sell, need to find an Amiga company or want any of the other information they offer.



Amiga RC5 challenge

The Amiga RC5 team has recently slipped down to seventh place in the overall standings of the international code-cracking competition, due to a new team climbing at an astonishing rate. The good news is that the recent growth in the use of PowerPC Amigas has resulted in an overall increase in progress and the chance of regaining sixth place. All Amiga owners online – but especially those with PowerPC cards – should join the challenge. The process runs in the background and has no effect on the normal running of you machine, only using the CPU when it would otherwise be idle. ■

Neil Bothwick

Contacts

Miami
http://www.nordicglobal.com

NetConnect2/Genesis
http://www.active-net.co.uk

NewsRog
http://www.frii.com/~srk/ShadowWorks/Preview/NR.html

STRICQ
http://www.momo2000.com/~mclaughd/

AmiBench
http://thunderstorms.org/AmiBench/index.html

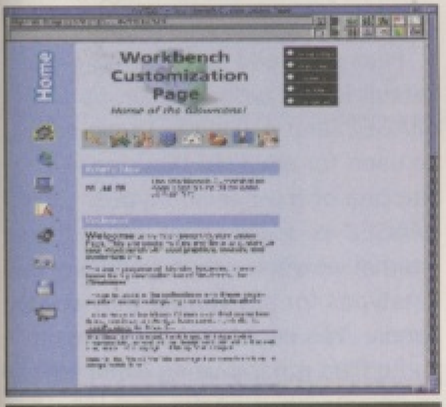
Amiga RC5 Team
http://homepage.cistron.nl/~ttavoly/rc5/ .

Surf of the Month

That rubber-suited water sportsman (no reference to his surfing antics either), Neil Bothwick, dips his toes in the drink for the last time ever... at least for CU Amiga anyway.

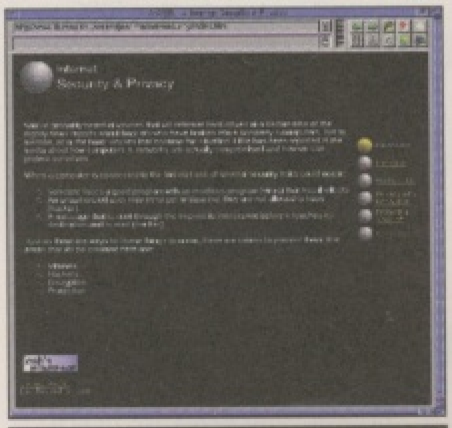
We haven't covered many Amiga-specific sites lately (none at all last month) so let's start by remedying that. **Pure Amiga** started from a group of people who met on IRC, set up a few web pages, then a mailing list and then it just grew from there. Their site is very clearly laid out with easy navigation and sensible use of graphics.

The range of information contained in the site and linked to is quite impressive. This is well worth a look. It seems that Amiga users never tire of customising their Workbench. The range of icon sets and backdrop images just keeps growing. A new site has just appeared dedicated to this. The **Workbench Customization Page** has a collection of icons, images, backdrops, fonts and samples to change the appearance of your Amiga. The icons are a new style called GlowIcons that use the NewIcons colour system but don't look like NewIcons. They have a less "cartoony" look to them, but the unique feature is the way each icon gains a halo when you select it,

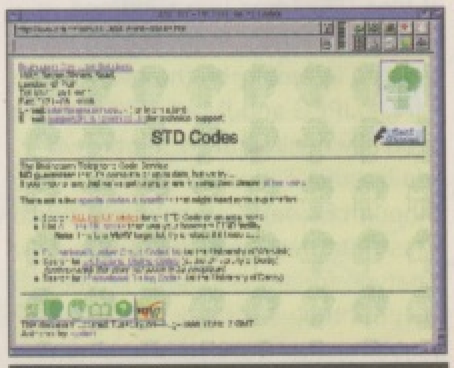


Workbench Customization

hence the name. Any discussion of the Internet soon gets round to security in one form or another. While many people worry too much about this, others don't worry enough. **Internet Security & Privacy** covers several important topics, including ones that many people give too little thought to, like the choice of a password. While parts of the site are written with PCs in mind, most of the advice on here is applicable to all computers. One area of Internet security that can be very confusing is **Pretty Good Privacy**. David Rosoff's PGP pages try to put this fairly complex subject into an easily digestible form, with suitable warnings like "the rest of this paragraph is chock full of techie crap. If you are confused enough already and would just rather not know, skip it". If you've ever wondered about using PGP but have been put off by its apparent complexity, this would be a good place

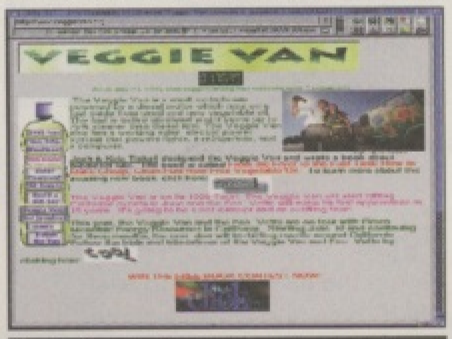

Internet Security & Privacy

to start looking at it again. We've looked at online telephone directories before, here's a variation on the theme. How often have you seen an advert that gives a phone number without saying where in the country they are, or dialled 1471 to find an unknown STD code? The **Brainstorm STD Codes** page has the answer, you can either type in a single code to get the location, or you can download the full list to use it offline. It also has some information on international dialling codes and access to a couple of university databases on telephone codes and



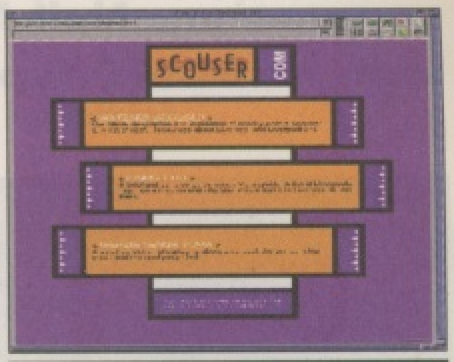
STD Dialing Codes

numbers. After seeing John Kennedy's piece on the Sinclair C5 in last month's Techno Tragedies, I thought I'd look for a C5 devotee's site. I didn't find one, but while looking at Alternative Transport, I found the **Veggie Van**. This van runs on a fuel made from used vegetable oil, although it is a little more involved than frying your chips then emptying the chip pan into the tank. It's supposed to be very environmentally friendly, but you'd probably have a heart attack after eating all the fried food needed to keep it on the road.



Veggie Van

Living fairly close to Liverpool, I was interested to stumble across **Scouser.com**. This site is devoted to Liverpool, the city, the people, places to go and the humour. It's not exactly official, I'm not sure what the tourist board would make of it, but I enjoyed it. Some of the design is a bit dodgy but the

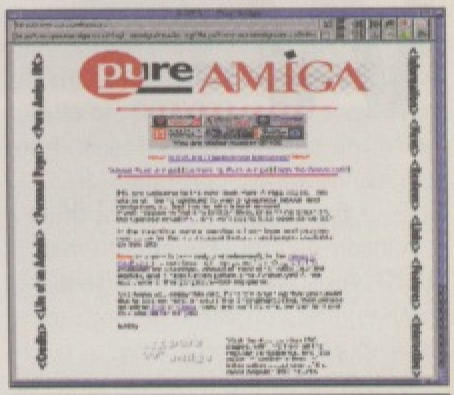


Scouser.com

content is good.

Finally, while we are all waiting for more news on the next Amigas, keep an eye on the various official and authoritative information resources, especially Amiga Inc and Amiga International for official announcements, and sites like the Amiga Web Directory, Amiga Org and Team Amiga for other news. ■

Neil Bothwick



Pure Amiga

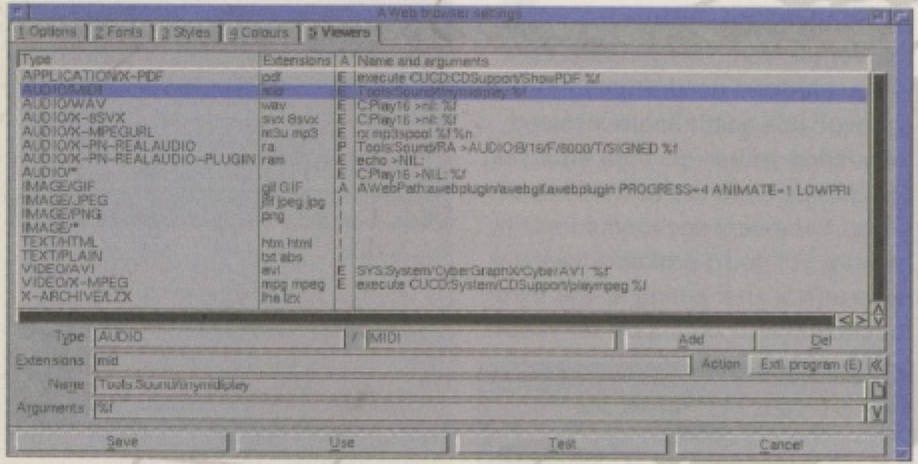
URLs

Pure Amiga	http://www.pureamiga.co.uk
Workbench Customization Page	http://reality.sgi.com/mchaput_aw/index.html
Internet Security & Privacy	http://www.lib.msu.edu/weasejos/internet/security/index.htm
PGP – Pretty Good Privacy	http://www.arc.unm.edu/~drosoff/pgp/pgp.html
UK STD Dialing Codes	http://www.brainstorm.co.uk/utils/std-codes.html
Veggie Van	http://www.veggievan.org
Scouser.com	http://www.scouser.com/
Amiga Inc	http://www.amiga.com
Amiga International	http://www.amiga.de
Amiga Web Directory	http://www.cucug.org/amiga.html
Amiga Org	http://www.amiga.org
Team Amiga	http://web.wt.net/~gpeake/teamamiga.html
CU Amiga Online	http://www.cu-amiga.co.uk

Wired World



Desperately trying to avoid any puns about muted clowns of French persuasion, Neil Bothwick has a look at MIME types.



▲ **Configuring AWeb to play midi files through a midi device or card. MIME types are set in the Viewers section of the Browser preferences window.**

We have come a long way since the days of having to edit text files in ENVARC: to alter the MIME settings for AMosaic, but despite the MIME configuration GUIs of the current browsers, there is still some confusion about what MIME types are, how they affect you and how you can use them to improve your web browsing.

MIME types are the Internet standard for recognising and handling a wide range of different types of file. Although originally aimed at dealing with file attachments in email (MIME is an acronym for Multipurpose Internet Mail Extensions), MIME types are most often encountered in web browsers.

Each MIME type definition relates to one type of file, and specifies two things, how to recognise it and what to do with it. It is a little like the current datatypes system, or the CUCDfile/CUCDprefs combination used on the CU Amiga cover CDs. Each browser has a slightly different configuration GUI but they all work in basically the same way. There are four elements to a MIME type configuration; Type, Extension, Action and Viewer.

Type

This is the name given to each MIME type and actually comes in two parts, a type and subtype. The main types are TEXT, IMAGE, AUDIO, VIDEO and APPLICATION. Each one is then subdivided, so for IMAGE we have IMAGE/JPEG, IMAGE/GIF and so on.

You can also have a subtype of *, IMAGE/* which covers any image that hasn't got it's own specific MIME type.

Extension

Unlike datatypes (or CUCDfile), MIME uses a very simple method of determining the type of a file: it looks at the file extension. This can, and does, cause problems. For instance, there are sites using jpeg images saved with a gif extension. If you use a datatypes based viewer, or something like Visage, that handles multiple image formats this doesn't matter.

But if you use a GIF-only viewer for GIFs and a JPEG-only viewer for JPEGs they could get a little confused. However, there is another factor to consider here. Generally the server will send a MIME type before it sends the file, so if the servers sends IMAGE/GIF the browser will handle it like a GIF file, no matter what it really is.

Action

There are three main choices of action to be taken for a particular type of file: use the browser's internal routines, pass it to an external program, or save it to disk. There may be other options here, like using datatypes or using a PIPE to pass it to an external program but these are the main ones.

Viewer

If you use an external option, this is the command the browser will use. The browsers also have codes you can include in the command to represent the name of the file, the URL or the browser's screen. All three use %f for the file name. The others vary between browsers, so check the documentation.

There are a number of officially defined MIME types, but you can define any you want. Unofficial MIME types should start with "X-" to avoid clashes with any future official ones. You could define a MIME type for OctaMED modules as AUDIO/X-MED with a .med extension and the appropriate call to OctaMEDPlayer as the action.

Setting them up

Let's have a quick look at the official MIME types and some ways to set them up, then we can see how you can deal with a wider range of files. TEXT has two subtypes, PLAIN and HTML, both should be handled internally by the browser. IMAGE/JPEG and IMAGE/GIF are generally dealt with by the browser's internal decoding routines, although PowerPC owners will find it faster to use the akJFIF PPC datatype for JPEG images rather than the browser's 68k based decoding. IMAGE/PNG also seems to be used as an official type, although it's not mentioned in the RFCs (RFCs are the official standards documents of the Internet).

VIDEO/MPG is for mpeg videos, although playing these on a 68K Amiga while maintaining an Internet connection is not really a practical option. The only audio type officially defined is AUDIO/BASIC even though most audio files on the web are in WAV, MIDI, RealAudio or MPEG format.

APPLICATION/OCTET-STREAM is a general term referring to a binary file. A browser should treat any file it doesn't recognise as application/octet-stream. The standard behaviour for this is to open a file requester and save the file to disk.

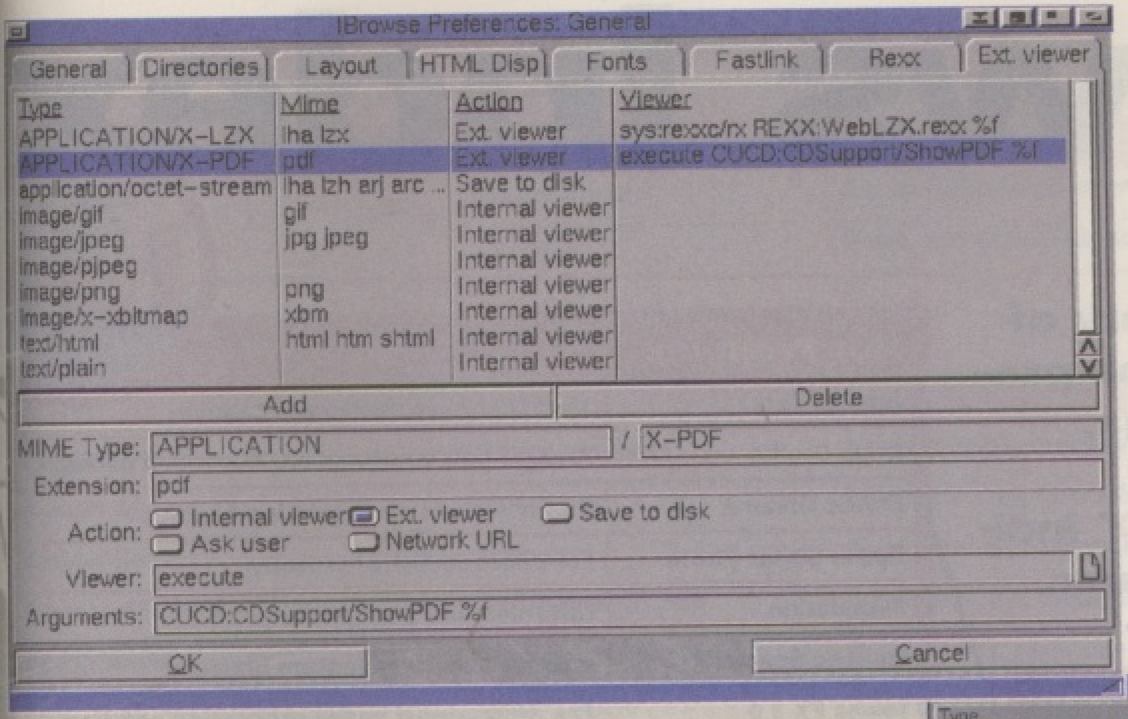
Adding your own

Now let's look at setting up a browser to handle some more file-types. Wherever possible the programs referred to here will be on the CD, along with a page containing links to the various types of files so you can test your setup.

First you need to make sure your default MIME types are set up for IMAGE/* and AUDIO/*. These will be used for any files that don't fit into one of the specific types. IMAGE/* is usually best left to the internal viewers, which generally call datatypes for any format they can't handle. You could use datatypes for audio files too, by using Multiview as an external program, but Play16 is better for this. Copy Play16 to your C: directory, if it's not already there, and set up AUDIO/* as:

Type:AUDIO/*
Ext:Leave blank since this is a default
Action:External
Command:C:Play16
Arguments:>NIL: %f

There are differences between the browsers here. Action is called



▲ MIME settings are handled by the External viewer section of the preferences in IBrowse.

External Program in AWeb, External Viewer in IBrowse and View in Voyager. Don't worry, it's just different names for the same thing. Voyager doesn't have an Arguments gadget, so you put "C:Play16 >NIL: %f" in the Command gadget. The %f is replaced by the name of the file in each case. It's best to give the full path for the command, browsers sometimes have trouble finding programs otherwise.

Play16 will handle most sampled audio formats, but there are a few others you may come across. MIDI audio is well suited for web usage since the files are very small, even for a long tune. GMPlay is an excellent MIDI player that requires no MIDI hardware, set it up like this:

Type:AUDIO/MIDI
Ext:mid (note you do not include the dot before the extension)
Action:External
Command:GM:GMPlay
Arguments:>NIL: %f

If you want to use any other options with GMPlay, put them before the %f, like ">NIL: frequency 16000 volume 120 priority 3".

If you have MIDI hardware, such as ProjectXG or a Yamaha MU10, there is a command supplied with MidiPlay that simply plays the file with no GUI. Put midi.library in LIBS and tinymidiplay in C: and use this:

Command:c:tinymidiplay
Arguments:%f

For streamed MPEG audio (see the boxout) we need a slightly different approach. The links have a .m3u extension, if you download one of these files you'll see it's a text file containing the URL of the audio stream. There is a handy ARexx script on the CD that will read this file and start playing the audio stream with MPEGA. The MIME type settings are:

Type:AUDIO/X-MPEG
Ext:m3u mp3
Action:External
Command:rx (or sys:rexxc/rx if your browser needs the full path)
Arguments:mp3spool %f %p
(change the %p to %n for AWeb)

The %p or %n is replaced with the name of the browser's screen. This is so the script can open a window on the screen. Since the link is to a continuous stream of audio data, you need the window to be able to stop the playback with Ctrl-C.

Application types

You could set up application MIME types for just about any kind of file you like. We covered using a script to automatically unarchive LHA and LZX archives in the July Wired World. NetConnect2 comes with voyager pre-configured to load archives into X-Arc. If you look in the Wired World directory on the CD you may find a script to load them into a Directory Opus lister with ArcDir ("may" meaning I haven't written it yet but hope to have done so before the CD's deadline).

One type of file that is fairly popular now is Adobe's PDF (Portable document format). I use xpdf to view these, but you can't call it directly from the browser as it needs a larger stack. As with mpeg audio the solution is a script, this time a short DOS script like this:

```
.key pdffile
.bra {
.ket }
stack 20000
c:STool F
Workbench#?
c:xpdf {pdffile}
```

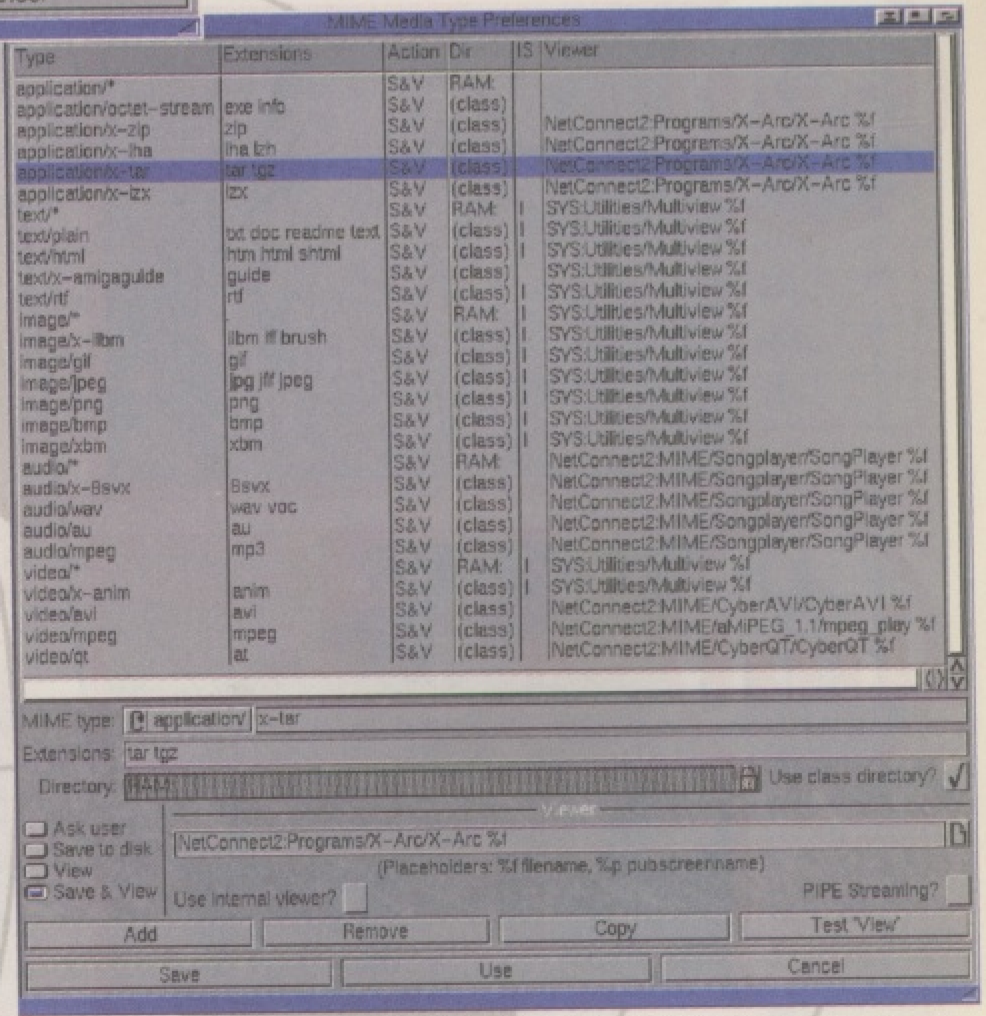
STool is there to bring the Workbench screen to the front to stop xpdf opening on the browser's screen, since that causes crashes here. You will not need this line if you run your browser on the Workbench.

And that's all there is to it...

You should be able to configure your browser to recognise and handle just about any type of file now, as well as altering your existing MIME types to use the viewers you prefer.

With the exception of the streaming formats such as MPEG audio, you can test all of these offline with a file from your hard drive. ■

Neil Bothwick



▲ Setting the MIME types in Voyager – note the lack of an Arguments gadget, you include arguments in the Viewer gadget instead.

Live and direct

There is another type of audio on the WWW, called streamed audio. This is where the data is supplied as a continuous stream and played in real time, as opposed to the usual method of downloading a file completely and then playing it. The most popular format for this is a proprietary format called RealAudio. The owners of this format will not produce an Amiga version, or even release details on the format so someone else can write it.

There is a player available for the Amiga, but it is of dubious legal status, so we can't cover it here. There is another format for streaming audio, mpeg. Streaming mpeg uses a much lower quality setting than for the CD quality files you may come across, since CD quality mpeg needs a transfer rate of around 1MB/s. This also mean that the decoding can easily be handled by a 68030 without stopping everything else working.

Reviews Index

This index contains a summary of product reviews from only the previous four issues of CU Amiga, sorted by issue and then alphabetically. This symbol '✪' indicates a Superstar award winner.





Hot Products

Aminet Sets	The must-have shareware archive.
Draw Studio	Amiga's best structured art/illustration package.
Elastic Dreams	Swirly picture manupulation hi-jinks.
Epson Stylus Photo	For photo-realistic hardcopy.
Foundation	Ultra-detailed God game.
Genetic Species	A damn fine 3D adventure blaster.
Image FX 3.0	*The* professional image processing software.
Miami 3.0	Makes jacking into the Net so easy.
OctaMED SoundStudio	What? Still using Octamed 6? Get this now!
Opus Magellan	We love this Workbench replacement – OS3.5... who needs it?
Pace 56K Voice Modem	The Rolls Royce of Modems.
Pagestream 3.3	You want to lay out pages? Look no further.
phase5 PowerUp cards	PowerPC accellerators.
Power Scan Magic	Use big PC monitors with your Amiga.
Power Tower	The best place to re-house your 1200.
PPaint 7.1	The best pixel paint package on any platform.
Quake	Another damn fine game.
Siamese RTG	Splice your PC to your Amiga.
SoundProbe 2.0	Truly awesome sample manipulation package.
TurboPrint 6	Must-have print enhancement package.
VoyagerNG 2.95	Surf the web in style.
Wizard Mouse	The rodent of choice in the CU Amiga offices.
Wordworth 7	The top digital quill on the Amiga.
CU Amiga Magazine	Of course.

Reviews Index

Title	Type	Comment	Score
June 98			
AWeb-II 3.0	Comms (browser)	The first Amiga browser with Javascript	90% ✪
ImageFX 3.0	Graphics (paint/process)	The best image processor goes from strength to strength	95% ✪
Malice (for Quake)	3D game	Utterly brilliant, worth buying Quake for alone	95% ✪
MasterISO V2	CD-RW software	A great all round package	88%
Micronik External Scan Doubler	Scan doubler	Well deserving of the Boing Ball	93% ✪
Micronik Internal Scan Doubler	Scan doubler	An inexpensive route to a high quality display	88%
Power Digital Camera	Digital camera	Easy to use, fun, and cheap – but results don't impress	81%
Quake	3D game	The ultimate in atmospheric shoot 'em up action	95% ✪
Sirius Genlock	Genlock	Superlative video output – at a price	90% ✪
The Labyrinth of Time	Adventure game	Some design flaws, but an engaging game nonetheless	78%

Title	Type	Comment	Score
June 98 continued...			
Turboprint 6	Printer drivers	An essential companion to any modern printer	93%
TV-Amazing	TV tuner	Good, but not ideally suited for Amiga use	75%
July 98			
Amiga Forever	Amiga emulator	Very workable Amiga emulation	87%
Aminet 24	Various	The latest downloads from the Net	89%
Aminet Set 6	Various	A gargantuan collection of software	90%
Eyetech single-slot Zorro	Expansion (A1200)	Functional, but inelegant and expensive	78%
EZ-PC Tower	Tower system	An excellent, all-in-one Siamese system	89%
Flyin' High Patch/Data Disk	Racing game	Bug fixes and extra courses to make Flyin' High playable	74%
Pyromania	DTV (clips)	Loads of quality fire animation clips	92%
Quake: Mission Pack 1	3D game	A great way to get more out of Quake	87%
Shrak for Quake	3D game	Probably one of the finest add-ons for Quake	88%
Tornado 3D	Graphics (3D)	Flawed, but exciting enough to risk	87%
Virtual Karting 2	Racing game	A sequel that should never have happened	40%
Wheels On Fire	Racing game	A fun game, marred but system unfriendlines	50%
Yamaha MU10	Sound card (MIDI)	Good, but not as flexible as a proper sound card	85%
August 98			
Catweasel Mk II	Floppy drive interface	The best way to improve your floppy capabilities	89%
Eyetech CDPlus SE	CD-ROM drive	No excuse not to buy a CD-ROM drive now	90%
Foundation	God game	A Superstar despite the flaws – and it's getting better	90%
Genetic Species	3D game	A great synthesis of adventure, suspense and blasting	94%
Samplitude Opus	Audio package	The best hard drive recording and editing system	86%
Scan Magic	Scan doubler	Gives a cheap, high quality display	90%
Scan Magic (with flicker fixer)	Scan doubler	The best Amiga display this side of a graphics card	92%
Siamese V2.1	Network/RTG package	The best thing to happen to a PC	94%
SoundProbe 2.0	Audio package	An essential piece of software for anyone into sampling	92%
VDC200p	Digital camera	Good package with acceptable output and a great price	86%
September 98			
Air Mail Pro 3.1	Comms software	Well worth a look if you fancy a change of mailer	86%
Amiga Developer CD 1.2	Developer tools	A must for all propeller heads	90%
Ateo A4000 Tower	Tower case	Opens the world of tower conversions to A4000 users	89%
CrossDOS 7	Disk utility	Read and write PC disks – a long overdue upgrade	90%
Epic Encyclopedia 1998	Multimedia	Plenty of information, let down by the quirky interface	73%
EZ-VHA Mk2/Plus	Scan doubler	A quality scan doubler that dares to be different	89%
EZ-Writer	CD-R drive	Good entry level CD-R system	87%
Prelude	Sound card	A solid card with good software support	83%
Time of Reckoning	3D game	A must have for Quake and Doom players	92%
Ultra Violent Worlds	Shoot 'em up	Pathetic example of the genre	59%
World News	Comms software	A worthy newsreader	80%

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- SwazBlanker 2.7 AGA
- RD's Datatypes
- Iconian 2.98s AGA 90%
- Deluxe Galaga AGA - Full version (2)
- Diamond Caves Latest (2)
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- Samurai Showdown AGA

WB2+ UTILS (= NO. OF DISKS)
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- Disney Colour Clipart (2')
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- RD's Instruments (2)
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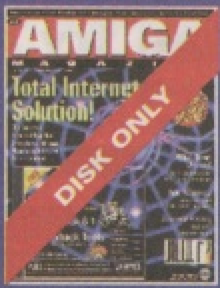
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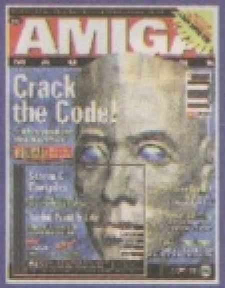
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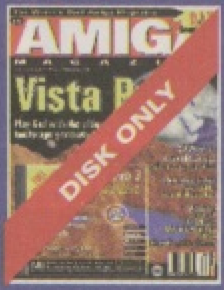
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Disks: Pro Page 4.1 (full program) MPEGA 2.4, Sysinspector, The Sun game & more!
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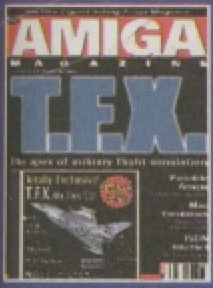
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Disks: Free Net software, Quarterback 6.1 inc QB tools, Big Red Adventure
Features: Total Internet Solution, the history of the Amiga & a look at Amiga artist, Eric Schwartz.
Inside: Final Writer '97, Siamese RTG 2.0, Burn It...



AUGUST 1997
Disks: Dogfight, Turbo Print 5 Lite, Storm C Compiler
Features: Power PC is coming, Crack the Code, plus Power Gaming
Inside: Cinema 4D, Voyager NG 2.90, IBrowse 1.12 & Tower add-ons...



SEPTEMBER 1997
Disks: Sixth Sense Investigations, Vista Pro, MakePath, GeoMorph
Features: New Faces of Amiga Gaming, Amiga: The Next Generation, DIY Sound Card
Inside: Art Affect 2, Art Studio 2.5, Micronik gen-locks, Flying High



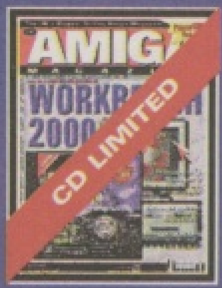
OCTOBER 1997
Disks: TFX, TB 303 Emulator, Virus Z, Video Easel, Visual Prefs
Features: TFX: Quickstart Guide/Techniques & Tips etc., Suzanne: The Portable Amiga
Inside: Fusion Mac Emulator, Civilization, Mk II EZ Tower, Storm C



NOVEMBER 1997
Disks: Draw Studio 2 Lite, AIR Link Software
Features: D.I.Y. AIR Link, Aladdin 4D V5.0, Hydra A1200 Ethernet, Sensible Golf
Inside: Epson Stylus Photo, OxyPatcher, More TFX Tips, Visual IFX, Envoy 2.0,



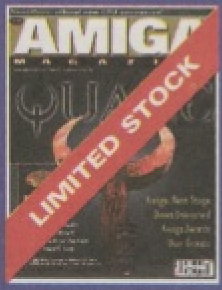
DECEMBER 1997
Disks: PC Task 3.1, Dir Work 2.1, Workbench enhancements; icons, backdrops etc.
Features: Myst, PowerUP: First look, ISDN: The Net on speed
Inside: Imaginex, HiSoft Squirrel CD-R, Sharp MD-MS200 Minidisc



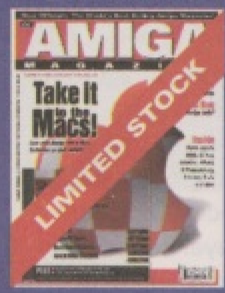
JANUARY 1998
Disks: PPaint 6.6, Trapped 3 Demo, Sound Samples. CD Demos; Sound Probe, Foundation
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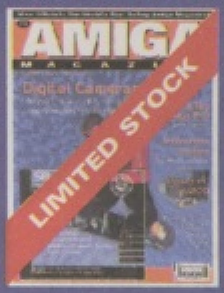
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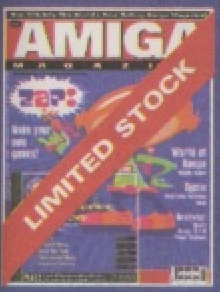
MARCH 1998
Disks: Doom, NetPBM, Cartoon Studio, AmIRC, VirusChecker III
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Inside: TurboCalc, HiSoft C++, WebFTP, Pagestream 3.3, Ultimate Super Skidmarks



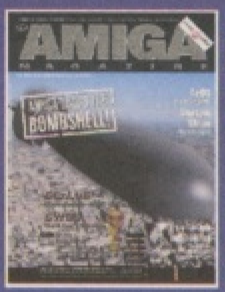
APRIL 1998
Disks: Shapeshifter, Mac Emulator, PowerPC Doom, New SoundTrackers
Features: Take it to the Macs, Millennium Bug, PowerPC Update, PowerPC Winners
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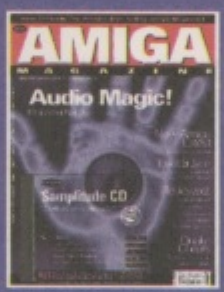
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JUNE 1998
Disks: Reality Game Creator, Web FX, ADoom, PlayMF, Petro Speech
Features: Game Creation, Spam, World of Amiga Show Guide
Inside: Image FX 3.0, Turbo Print 6, Scan Doublers, Sirius Genlock, AWeb, Master ISO



JULY 1998
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AUGUST 1998
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Q&A

Richard Drummond hangs up his trusty old stethoscope after completing his last ever technical Question and Answer surgery. Now if you will allow him he can try and reclaim his life back. Thankyou.

Logos

Mysteries and meanings ...

WORKBENCH — Solutions to those everyday troubles with your Workbench.

EXPANSION — If you need help getting more from your Amiga, just ask!

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SOUND — Trouble making your Amiga sing? We've got the answers here.

HARDWARE — Technical matters beyond the scope of plug-ins and plug-ons.

SOFTWARE — Answers to queries on particular pieces of software.

HELP — General queries which just don't seem to fit in anywhere else.

CD-ROM — Specific help with CD-ROM solutions and driver problems.

GRAPHICS — Problems with art and design? Help and advice is at hand.

PERIPHERALS — Printers, monitors, we'll solve your peripheral blues for you.

Enhanced CDs

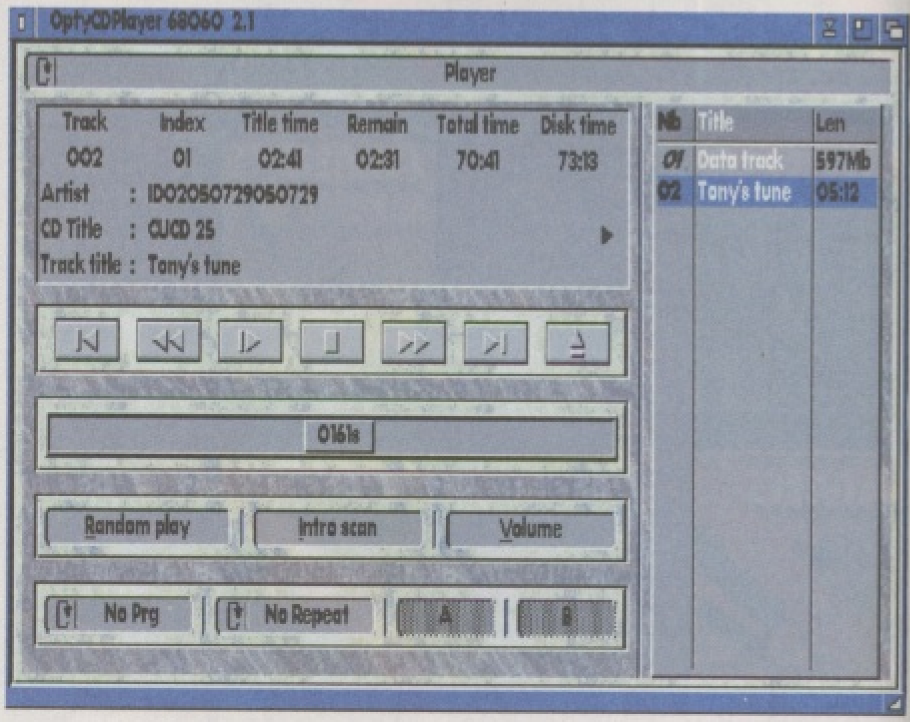
I am writing in reference to Peter Lamont's email in last month's Q+A. He asked if there is any way to read enhanced CD's on his A1200 but you didn't seem to understand what he meant by "enhanced CDs" and didn't answer the question properly. What he was talking about was the singles or albums that you can buy that contain artist information and usually a pop video as the disc's last track. As the data information has to be the first track for an Amiga to be able to read it as a CD-ROM, the information cannot be accessed. Workbench CD players such as OptyCD-Player can identify the last track as containing data and even state its size but cannot access it.

I would also like to know if there is any Workbench hack that would allow me to read this information as I have many CDs that contain Quicktime data and short of connecting my A1200T to my dad's PC and downloading them all individually I would rather be able to view them directly. Thanks very much.

Phil Chapman,
via email.

The reason we did not know what Peter meant by "enhanced CDs" is because the term is a generic one applied to many different CD formats. While the advice we gave was correct, perhaps it was not explicit enough.

All CD formats are derived from Sony and Philips' original specification for audio CDs – the so-called Red Book standard. Other formats – such as the CD-ROM format for data (the Yellow Book) – are extensions and workarounds of that specification. Enhanced CDs employ various different techniques of encoding multimedia data into an audio CD



▲ Mixed mode CDs, courtesy of OptyCD player

– hiding the data from normal audio CD players, while allowing the access of this data from special "players" like CD-ROM drives.

The format in vogue at the moment is CD-Extra (also known as CD-Plus), defined by Sony and Philips and supported by Microsoft. This is a two-session format; it permits for up to 98 audio tracks to be recorded in the first session and one ISO9660-compatible data track in the second session. This data track is only accessible via a multi-session CD-ROM drive – providing you are using a filing system which supports multi-session discs.

You can, therefore, read the data track on a CD-Extra disc with an Amiga, if you have a multi-session capable drive and filing system (like Elaborate Bytes' CacheCDFS). The only proviso is that the disc must have the data track listed in its table of contents and flagged as data – which must be the case if, as you say, OptyCDPlayer recognises it as a data.

Check the library

I hope you can help me. I bought a 68040/25 MHz accelerator and a 32MB SIMM at the WOA show. I cannot get the card to work in my A1200 with the SIMM installed (although it works without it). When I try to boot the machine, it Gurus with code 8000 000B. I returned the 32MB module and got it exchanged, but it still wouldn't work.

To find out where the crash was occurring, I put SnoopDOS in my startup-sequence: it happens just after loading the 68040.library. The version of this library I am using – which was supplied with the accelerator – is version 37.10.

Damien Clarke,
via email.

The problem is caused by the fact that you are using an old version of the 68040.library. This library is necessary to emulate in software the FPU instructions that are not implemented on the 68040. The

fact that you get Guru number 8000 000B re-inforces this diagnosis: it is an emulator error.

The latest version of the 68040.library is V44.3, which can be found on the phase 5 ftp-site at ftp://ftp.phase5.de/pub/phase5/06 0/68060-V44_3.lha. You will probably need a newer version of SetPatch as well, since this is the command which causes the 68040.library to be loaded. The latest version of this isV43.6b and can be found on Amiga International's web-site at http://www.amiga.de/files/PublicBETA/SetPatch43_6.b.lha. Both of these are also on this month's CD in the Q+A drawer.

A1200 040 accelerators can cause a number of other problems. 68040 chips are quite power-hungry and the standard PSU shipped with A1200s lacks the muscle to cope – especially if you have a large hard disk, etc. There is also a problem of heat dissipation: the 040 can get hot enough to fry a full English breakfast on. If you've got a desktop machine, it's a good idea to leave the trapdoor cover off and mount your machine on taller legs to increase air flow. A bigger fan wouldn't go amiss, either.

CD-ROMs, the Universe and Everything.

CD-ROM

I am writing to ask if you could please help me. I wish to spend about £120 on a CD-ROM drive for my Amiga 1200 (2MB). As I do not know anything about these drives, could you please answer me these questions:

1. Do the drives operate through any of the ports at the rear of my Amiga, or do they have to be fitted inside my machine?

2. What the heck is a SCSI device and what in heavens does it do?

3. What is the difference between a "Surf Squirrel" and a "Classic Squirrel"?

4. What is an IDE buffered interface?

5. Is it better to buy a CD-ROM drive that is not powered by the Amiga (ie; it has its own power supply)?

6. Is a double speed (x2) drive sufficient for everyday use?

C. Forrest,
Lincolnshire.

Some short answers to your questions are (the detail follows):

1. You cannot connect a CD-ROM drive to any of the ports at the rear of your Amiga. The two usual ways of connecting up such a drive are either via a SCSI interface or via an IDE interface. Both these solution require some extra hardware.

2. SCSI (pronounced scuzzy, Small Computer Systems Interface) is a bus standard for communication between a computer and several devices, usually storage devices like hard disks, CD-ROMs, etc. The standard specifies the protocol, cabling, connectors, etc. SCSI is a fast and reliable, although expensive system.

3. The Squirrel is a SCSI interface for the Amiga 600 and 1200 which connects via the PCMCIA port, the card slot at the left-hand side of your machine. The Surf Squirrel, in addition, has a built-in fast serial port.

4. The Amiga 600 and 1200 have an internal IDE interface which was intended for use with one internal hard drive. With the correct cable and software it is possible to attach up to four devices to this interface. However, the IDE interface is not buffered and it is possible (although unlikely) to damage your computer by overloading it. A buffered interface is designed to prevent such damage.

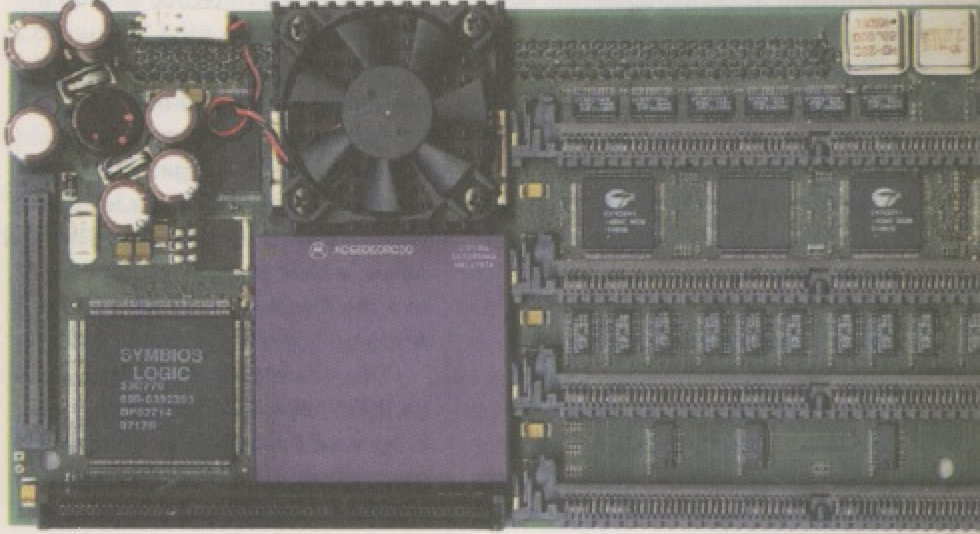
5. If it is an external device it will come with its own PSU anyway; if internal, it is intended for use in a desktop or tower case. These type of cases typically have a much larger power supply than a standard 600 or 1200 and are able to provide power for a CD-ROM.

6. The only time when the speed of a CD-ROM drive is critical is when spooling animations directly from disc, e.g. in games; some games specify a minimum of 4x. For other use, the speed of the drive is immaterial – although as usual the faster, the better.

There are several cheap solutions for connecting a CD-ROM drive to your Amiga 1200 (or 600). One way is to get a Squirrel SCSI interface and a SCSI drive. As mentioned before, this device connects to the PCMCIA slot, so is easy to install. The other option is to buy a 4-way buffered IDE interface and an ATAPI CD-ROM drive. Installation of this interface is internal, so requires your machine to be opened up. However, it is a fairly straightforward procedure: if you managed to install a hard drive, then it should prove no problem.

The advantages of going for the Squirrel are the simple installation, stability and the fact you can connect up to seven devices. The advantages of the IDE option are cheapness and speed. The Squirrel device is not particularly fast, due to the poor bandwidth of the PCMCIA port. With a fast processor, you will get higher speeds from an IDE device.

You should look out for dealers who bundle drives and interfaces cheaply. For example, Eyetech sell a 24x speed drive and their buffered IDE device for £85.95; HiSoft sell a double speed SCSI drive with a Squirrel for £79.95.



▲ **Not fast enough? The Cyberstorm PPC board.**

Light my fire

PERIPHERALS

I have been reading frequently about Firewire devices in the computer press of late.

1. Just what is Firewire?

2. Is it anything to do with USB?

3. Are there any plans to implement it on the Amiga?

Ed Smithton,
Loughborough.

1. Firewire is a trademark name for Apple's implementation of the IEEE-1394 high speed serial bus standard. Firewire was originally conceived by Apple as a cheap and simpler replacement for SCSI. It allows speeds (at the moment) of up to 50MB/s, supports hot-unplugging (devices may be connected and disconnected while still powered on) and is plug'n'play (devices do not need any configuration with IDs, jumpers, etc.).

The only devices that support Firewire at the moment are things like digital cameras, DV camcorders and monitors. Planned uses include anything from networking to interfacing of storage devices, printers and scanners. Because Firewire is peer-to-peer, no host computer is needed to control communication; it would be perfectly possible to download the data straight from a digital camera to a printer, for example.

2. No. Although superficially similar to Firewire, USB (Universal Serial Bus) is a completely separate bus standard. While Firewire is aimed at high bandwidth multimedia applications, USB is intended for connecting things like keyboards, mice, joysticks, modems etc. USB allows maximum transfer rates of 1.5MB/s.

3. None that we know of. There are not many places on a current Amiga that could permit the necessary bandwidth. If someone did wish to do so, it would have to be built into an accelerator card. If you read our CU 2000 feature last month, our hypothetical new Amiga featured both Firewire and USB. This is a fairly safe bet.

Faster, faster.

HARDWARE

I recently purchased a Cyberstorm PPC for my Amiga 4000. As a subscriber to your excellent magazine, I read your December '97 piece on overclocking the 68060. I am as a rule rather wary of overclocking CPUs but in this case it seems quite harmless: due to manufacturing changes the '060 can quite comfortably run at 66MHz and soon 75MHz.

The Cyberstorm PPC has two oscillators: one times the '060 and the SCSI controller, the other the PPC. The SCSI chip (or rather chips) doesn't seem to want to run at 66MHz.

I have noticed that on the '040 version of the Cyberstorm PPC the SCSI controller is timed with a separate oscillator. On the '060 version of the Cyberstorm PPC the socket for this crystal is empty, but there nonetheless.

My question is: how do I activate this extra clock to time the SCSI chip on the '060 version of the Cyberstorm PPC? That way I can overclock the '060 without affecting SCSI operation.

Ben Hermans,
Antwerp, Belgium.

Phew! This is an interesting question. We have been trying to glean information from phase 5 on the overclocking of their Cyberstorm PPC boards for some time – with little luck so far. The reason for this, I suppose, is that phase 5 do not wish people to tamper with their boards (notice the oscillators are always soldered on and not socketed).

The Cyberstorm PPC 040 and 060 boards are identical in layout. You will also notice that they have no jumpers to set. The boards are configured for different CPUs and clock speeds by means of solder pads. Hence the only way to modify them is to physically cut tracks or connect pads. This is obviously not something to perform lightly with a piece of hardware as expensive as these boards.

We suggest that all readers interested in overclocking their Cyberstorm PPC boards should pester phase 5 for the information. I know I will continue to do so, too.

Ditch the PC

PERIPHERALS

I have a towered up Amiga with a 2GB hard drive, 2 speed CD-ROM, 030 accelerator with 10MB of RAM, soon to be replaced with a spanking new 200MHz PPC card. What I would like to do is ditch my PC in favour of my Amiga. However I would like to keep my Optic Pro 4830p flatbed scanner and my Lexmark 1020 printer if possible.

Is there any way for me to use this scanner and printer on my beloved Amiga as the scanner has a parallel interface with a through port for the printer. If I can use these accessories then I can ditch the PC and purchase some decent software like Wordworth 7, instead of having to use Word which on my PC is sooooo slooooww!

Nick Sawyer,
via email

I sympathize with you; at work I have a PC which I only use when I wish to print something out – simply because getting an Amiga to print across a network is such a pain.

Well, there is good news and bad news. The good news is that you can use the Lexmark 1020 printer with an Amiga. You will need to use the HP DeskJet driver supplied with Workbench. The bad news is that there is no way to use the Optic Pro scanner with an Amiga.

This scanner communicates via an IEEE-1284 interface, the Enhanced Parallel Port (EPP) standard. While IEEE-1284 is backwardly compatible with normal parallel ports, the converse is not true – the Amiga parallel port does not support EPP. Perhaps, in the future, some hardware manufacture may produce an add-on like the fast serial ports we have at the moment – a plug-in board which equips your Amiga with an EPP. However, even if you did find some way of interfacing this scanner with your Amiga, there is currently no software support for it. The 4830p is a TWAIN-compliant scanner, but there is no TWAIN software for the Amiga, either.

Until there are more developments in this area of the market, if you really wish to use your scanner with your Amiga, you could always network the two machines and use the PC as a large scanner driver. Our networking feature this month will give you some ideas on how to do this.

A tower on the side

PERIPHERALS

My system is an A1200, 1.2GB hard drive, Awia CD-ROM, Blizzard 1230 MkIV with 16MB, Surf Squirrel and a Supra Express modem. I'm thinking of expanding, but don't really want a big tower system.

1. Which is the best option for adding extra devices, SCSI or IDE?

2. The Eyetech mini tower with CDPlus seems ideal. This will give me up to 5 IDE devices. Will this cause any problems or bottlenecks having this many connected to the IDE port?

3. Can I also run my internal hard drive if I use all the drive bays in the tower?

4. Is there a SCSI interface option? I really would like to use the Iomega Zip drive.

5. I would also like to fit a 1240 board. If I get the mini tower I will have to fit the board in the trapdoor. Taking into consideration the heat generated by these boards, which is the best board to go for?

About the mag, where would we all be without CU dropping through the door every month? Excellent.

Robbie Randall,
via email.

1. See the previous CD-ROM question. Other things to consider are;

2. You may only connect up to four IDE devices. You could use the spare space in the tower for SCSI devices via your Squirrel. There is a limitation in that these four devices will work in pairs, two in one channel, two in the other. While the speed of the two channels is independent of each other, the speed of two devices connected to the same channel is restricted to the speed of the slower of the two devices. Also note that both the IDE interface and the Squirrel are non-DMA: all data transfer is performed by the CPU. Hence a fast processor is needed for the best performance.

3. Yes. It would be best to put it in the tower, though.

4. Um, not quite sure what you mean here. It is possible to install SCSI devives into the tower as well. However, you can get an IDE version of the Zip drive.

5. The best 040 board to go for is the Apollo one. If you have moved all other devices to an external tower case, it will be quite safe to run one of these in a normal A1200. Heat will still be a problem, so see the question 'Check the library' on page 94.

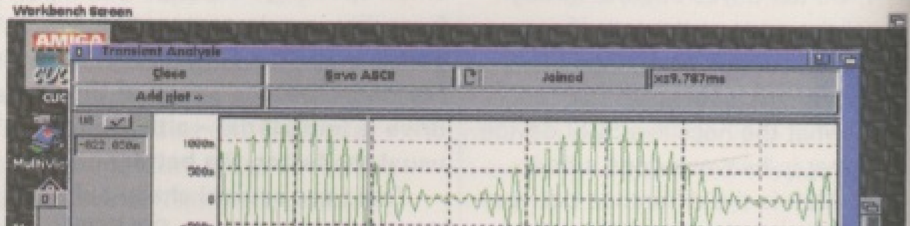
You CAD!

SOFTWARE

I am currently studying Electronics at university and we use packages like Spice on the PC for circuit analysis. I own an Amiga 1200 with an 030/50 card and 16MB of memory and I would naturally like to use my Amiga for homework, rather than having to buy a PC. Are there any similar packages available for the Amiga?

Stewart Green,
via email.

The Amiga is blessed with a very good port of Spice. It can be found in the archive spice3f5r3 in misc/sci on the Aminet.
There is also a graphical front-end for Spice available on the Amiga, which allows you to visually lay out components, define analyses, etc – instead of messing about with script files. It has a nice graphing tool, too. It is called AmiSPICEed and can also be found in misc/sci. (It's on CUCD26 too.)



▲ Spice up your Amiga's life and analyse a few circuits along the way.

A to ~~Z~~ N



N is for... No more. Well we never made it to Z, so this month you can savour the rarity of an 'A–N' column, compiled as always by that naughty but nice nutcase, John Kennedy.

N is for...

Nanosecond
A measurement of time, one nanosecond is 1e-9 or 1/1000000000 of a second. Nanoseconds are often used to express the speed at which memory operates: for example, 70ns RAM is faster than 80ns RAM.

NE2000
A make of networking card, using the Ethernet standard. The term NE2000 has come to mean a generic, widely supported standard. It's possible to use NE2000 networking cards in an Amiga fitted with a GoldenGate 2 bridgeboard card.

Nesting
Placing something inside something else: for example, in programming terms a nested loop is inside another loop.

Netiquette
Largely un-written rules on how to behave when using the Internet. To summarise: try to be courteous, don't quote more than you post, avoid large sigs at the end of mail, and read any FAQ lists before asking a silly question.

Network
A connection of two or more computers, connected together and able to share data, mail or resources such as printers. Networks come in two main types: peer to peer, in which every computer is an equal and shares with every other; and client-server, in which a central server computer provides resources to a collection of others systems. There are a few networking systems for the Amiga.

New line
A carry over from the days when computers used to communicate with us users by typing text on a tele-printer. As it spewed out its little characters, it would eventually need to take a new line and start over. Now the new line character has been included in the various character sets in used, such as ASCII, and still causes text to move down a line, and back to the left hand side of the screen.

Newbie
Slang term for someone who is new to the Internet, or new to posting in newsgroups. Often used as a term of abuse, although this is clearly against netiqette.

Newcli
An AmigaDOS command which opens a new window on the Amiga desktop. The window offers a way of entering text instructions – the AmigaDOS commands – and executing them. You can open multiple windows and run commands in them all simultaneously. From Workbench 2 and onwards, newcli does the same as newshell.

Newsgroup
One of the services available on the Internet is News, which is like a giant bulletin board full of gossip, chat, technical arguments and an awful lot more, including binaries which are best left alone to save your eyesight. There are thousands upon thousands of newsgroups, each with an individual name describing its subject, and sometimes its contents. Alt.digitiser is my favourite, as everyone is always so friendly – especially when they find out you use an Amiga.

Newshell
An AmigaDOS command which is identical to newcli. Opens a command line interface window.

NFS
Network File System, a file system which allows computers to share files over a network. Computers with compatible NFS systems can browse each other's hard drives. For example, an Amiga can be included on a PC network by using a utility called Samba to create a compatible NFS.

Nocapslock
An AmigaDOS commodities exchange program which temporarily disables the caps lock key. Needless to say, this is not used very often, except perhaps by people with fat fingers.

Nocarerefresh
A flag sometimes used in the definition of an Intuition window structure. It tells the Amiga's operating system that the program which created the window doesn't need to be told when the window has changed and is therefore in need of redrawing.

Nofastmem
An AmigaDOS command which temporarily disables all non-Chip RAM on the Amiga. This program was most useful in the very early days of the Amiga, when programmers were learning the ropes.

Some programs would fail because they would (wrongly) assume that all the memory they requested was Chip memory – an Amiga with megabytes of Fast memory was just too rare to plan for. These days, when any decent Amiga system has at least 8MB of Fast memory, this command is simply a relic of a bygone age.

Non-volatile memory
Memory which won't forget its contents when the power is removed. Examples of non-volatile memory include ROMs, EPROMs and the Flash memory which is used in digital cameras. None of these forms of memory need a constant supply of power. If they did, your Amiga wouldn't know how to boot up when you switch it on, as it stores its core operating system in ROM.

Non-volatile memory does need power to read its contents of course, but unlike most forms of RAM – such as the Dynamic RAM as used in the Amiga – they will remember their contents when the system they are in is switched off.

Notwork
A network which isn't working properly, is a notwork. Terrible pun, I know.

Null
In computer terms, null means nothing. When programming for example, a null string is empty.

Null modem
A null modem is actually an ordinary serial cable, wired slightly different from usual, and with two female connectors at each end. It allows a computer's serial port to be connected to another computer's serial port, instead of to a modem. This allows the two computers to communicate using standard terminal (modem) software.

Numeric keypad
The cluster of keys with digits, mathematical operations and an enter key to the right of the main keyboard. Except on the A600, which doesn't have one.

Backchat

Sadly this is the last ever Backchat, so don't write in any more because we won't be here.



▲ Quake: is it rubbish or is that just your Amiga?

Complete rubbish

I am thoroughly disappointed with CU for publishing the nine page spread regarding the "New Millennium New Amiga" article which as the disclaimers pointed out was a complete load of rubbish.

I regularly purchase CU Amiga and I felt let down as I expect to be able to read sensible and informative articles. I regard this type of article as childish and harmful to the present and future credibility of our beloved Amiga.

Please, I emplore you, refrain from this type of article and concentrate more on your usual high standard of informative (factual) features.

S Butcher, Gosport

Sorry to hear you didn't like that little glimpse into the future. It was backed up by lots of facts and educated guesses. See how much of it comes true. Did it really say "Disclaimer: this article is a load of rubbish"? We think not!

High scores

As much as I enjoy reading your mag, I sometimes wonder what's happening to you guys. After reading the Quake review, I got that Quake Player demo version and launched it to check the speed on my 060 50Mhz AGA. You guys must be nuts to think this thing is playable. Even my brother's old Pentium 75 does better! How ashamed I was! The problem being: you rated this game 95% and I quote "You can expect up to 10fps in full screen on a 060/50Mhz (...) 10 is great". I don't think so. I think you guys waited so eagerly to have Quake running on Amiga that you got carried away at the review, giving it an outrageously high score. ADoom is fast and playable, Quake is not, no matter how technically advanced it is. So 95% it might be, but not until we get a PPC version!

It's not the first time it has happened, as one year ago I bought Capital Punishment (91%) just to find it was completely unplayable. Now I'm afraid I can't rely on your reviews anymore! See, you won't help the Amiga by overrating products.

Diego Pappalardo, Belgium

Review scores are a tricky and always controversial subject. For instance, should we mark Quake down because it runs at unusable speeds on an 'average' Amiga? We think not, as it's the hardware at fault not the game. You complain because it is slower than your brother's computer, yet his CPU runs at a 50% higher clockspeed, and we'll bet it has better display hardware too. If you were to compare it to PC hardware of around the same power, you'd find that the Amiga version is indeed faster. We stand by that review.

As for your difference of opinion with our Capital Punishment reviewer, you will be glad to hear that the reviewer left CU Amiga two years ago, so you can be sure

Some reactions from the Internet to the news of our impending closure

I have always had this idea that the computer world is like Star Wars. Bill Gates and the PC are obviously the evil emporer sitting in his Death Star head quarters and their Storm Troopers. Then you have Petro as Obi-Wan and Carl Sassenrath as Yoda maybe. Then of course you have all the users who are the Jedi Knights with their new PowerUp boards as their light sabres, with which they fight the evil might of the PC. Then last but not least you have yourselves (and AF) representing the generals of the rebellion or Luke even, inspiring us to keep fighting and not lose hope.
So maybe this is the end of episode two: The Empire Strikes Back. We've had a serious loss but we haven't yet lost the struggle, and we won't because you've helped us to survive through this most difficult period.
Good Luck and thanks to you all.
Adrian (a bit of a dork) [he said that himself]

I'm going to be really sad to see you go. One Amiga mag fix a month just doesn't seem to be enough for me. To be honest I thought AF would be first to go as your mag is far superior and your web pages always seemed to be up to date. Hopefully the bosses at Future will realise what a great team you have going and snap up a few new employees.
George Elliott

Yaaarrrgh! That's me screaming in agony over the loss of my favourite non-Swedish Amiga magazine. It was a real treat at the end of every month with a pocketful of cash to enter the magazine shop and pick up the latest issue of CU Amiga. But, alas, no more. But maybe again in the near future...
Per-Gunnar Eriksson
Umeå, Sweden

Thank you for entertaining me with CU Amiga here in Ireland! Thanks for all the help in getting SEUCK to me on a disk, and I will do a game for ye. No one else would help so much and I don't think I would be here to say goodbye to ye if it was not for the great staff at CU.
Just like the C64, the Amiga will go on FOREVER...

If anyone does read this, then I hope ye all will have one last great time doing the last issue as it just don't get any more special than this. Farewell guys!
Keith Killilea.
Galway, Ireland.

I have owned an Amiga since 1985. I have enjoyed your mag for many years, I got a CD-ROM about eight months ago and have been buying the CD version each month. I am

he won't bother you again – nor will we for that matter, seeing as this is the last ever issue of CU Amiga.

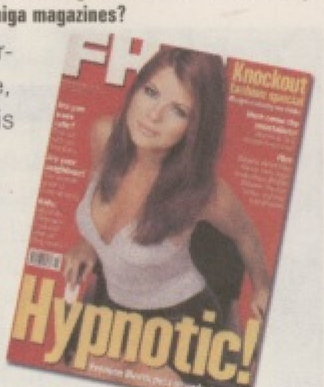
An angry Amigan

So just what has happened to the announcement from Amiga Inc which had been promised to be released just two weeks after the World of Amiga? Answer: Nothing. Not even an apology from the company on their web pages.

Is this nothing more than just a scam to keep a few employees for two Amiga magazines in work? Is it so that the now very disillusioned Amiga owners go out and buy just a few more products from the remaining Amiga companies? Amiga Inc have a lot to answer for. Not informing the user base is a grave error for a company that wants to make an impact and generate an enthusiastic repsonse.

If anything both CU Amiga and Amiga Format should both take particular criticism. Although undeniably supportive to the Amiga the child-like style of both magazines has to be dropped. Large title fonts and over-sized pictures throughout make both a laughing stock when trying to present a case for the Amiga as an alternative viable platform. I am not saying reading both magazines should be like reading The Guardian, but a more professional attitude should be taken.

Okay, so this has gone slightly off-topic from Amiga Inc, but we need their input into the Amiga magazines as well. By that I mean advertising, monthly updates from a spokesperson inside, etc. All this and more must be done to ensure that the Amiga gets back on track as a platform. A few years ago both magazines were selling 120,000+ copies and the Amiga was outselling other platforms, and companies other than Amiga retailers were advertising. If it means making the magazine look like FHM in respect to advertisements, by all means do it if it brings in revenue for the magazines. More money, more pages, more content, more discussion – but will it increase sales? How many of you at CU Amiga and Amiga Format would actually go out and buy the magazine (as it stands) if you didn't work on it?



The 700,000+ selling FHM: could this be the way forward for Amiga magazines?

I have forked out more than enough money on two Amigas to be considered for some sort of pay back from Amiga Inc, and all Amiga magazines, past and present (and future?). Maybe there'll be an announcement by the time you read this, but I'll stake a claim as to nothing will have been revealed as for the new CPU that Amiga Inc will use, nor any apologies from Amiga Inc nor Amiga International to the Amiga user base for being complete and utter mugs and sticking with the Amiga.

Rob Wilson, via email.

Well, you certainly aren't too happy, are you. Taking it from the top, Amiga Inc never promised an announcement two weeks after the World of Amiga show, that was just an Internet invention. What they said is that they would announce the OS partner as soon as it was settled, which they hoped would be within four weeks. It wasn't.

As for their failure in general to keep the Amiga community informed, alas you are right. Just keep in mind that it doesn't mean they aren't doing anything just because they aren't talking about it. We would certainly welcome input from them, regular updates and adverts would be great but that doesn't seem to be their plan right now.

As for your concern about magazine design, we welcome your opinions but we also realise that the look of the magazine is never going to appeal to every one of our incredibly diverse set of readers. The thing is that people generally don't complain about a magazine looking boring – they just don't buy the magazine. That means comments about it being "too childish" have to be offset by our own instinct as to how the mag should look, or to put it another way, how all of the information in the magazine should be presented. We try to balance the design of our pages to suit the subject matter, thus you will find more pictures in the games section than the Tech Scene section.

However many readers have applauded us on the more serious layout we have come up with – one even likened it to the Guardian.

As for the relationship between sales and advertising, you are mixing up cause and effect. FHM doesn't sell hundreds of thousands because it is full of generic advertising. It gets the generic advertising because it sells hundreds of thousands. The reason we sell less than in the past is because there are a lot fewer Amiga users than there used to be – it's that simple.

> **"Is this nothing more than just a scam to keep a few employees for two Amiga magazines in work? "**

As for the pay back thing – why do Amiga Inc owe you something because you bought something from Commodore? We don't see your logic. Besides when you buy something, you are making an exchange: money for product. Even if it was Amiga International you had bought your computer from, they wouldn't owe you anything for the money you gave them any more than you would owe them something for the computer they gave you. And as for the CPU announcement, you're right that there is unlikely to be an announcement by the time you read this, but then Amiga Inc always said they wouldn't be revealing much on the

sorry to see you go.
Skip Compton

I can't believe you're leaving us. In all this time (I can even remember when it was Commodore User) CU Amiga has just got better and better. Please, do something, anything. Get Amiga Inc/Int on your side, make some dodgy deals, sabotage Amiga Format, kill Bill Gates, anything!!! But seriously, to all the people who've worked on CU Amiga and all the people I've talked (or argued) with on the mailing list, good luck in the future, I hope I'll see another quality mag appear for the next Amiga revolution.
Somone whose name we lost

I must be honest. A couple of years ago I started buying English Amiga magazines. I bought them all and decided that Amiga Format and The One were the best ones, so I bought them regularly. Since then, I've never read CU. Sorry mates, AF has satisfied my needs so I've never bothered to try CU. But thanks anyway for what you've done for the Amiga community!
Gustav Gnosspelius, Sweden

I have been a reader since 1984. I fought off the Mutant Camels, I conquered Manic Miner, I fought The Sentinal, I Defended the Crown... I never made Elite. Nor, it would seem, have Amiga users

Thank you for keeping the flag flying through all the good times, bad times and impossible times. We will remember you. You have left behind a wealth of information and some of the greatest CDs on any computer *ever* (part II). Thank you for believing in creativity, individuality, rebellion and the unique.
Shelley Hannan

Having recently subscribed to your magazine, I am overcome by its impending demise. Any time myself or a relative visited the UK I begged for them to return with your cover disks or in later years CD-ROMs. Every month you brought new wonders to my cute lil' A1200 that startled my friends that use superior hardware with inferior OSes.
Your magazine was very professionally published with such great British humour it made a joy to read and it was read cover to cover .
Andrew McPhee

They have been the worst ten minutes of my life: I connected to the Net to get mails as always and suddently received the news through an AmiComSys user; I reached your great web site and scanned the announcement looking for some good, but more and more unexpected, news... My eyes became moist as I realized that a part of my life (last five years) were near to end. At

CPU for about a year. We wouldn't disagree that there is plenty to moan about, but at least get your facts right.

Two points

Just a few points I feel like making *(I'm tired, I'm going to bed soon...)*

1. The Amiga needs a revamp, not just for the increased processor power blah, but also because of the hacky-ish state that people's Amigas are turning into. I must have about 10 patches, BlizKick, MCP, MultiCX, everything, all to boost performance or make life easier. It's commendable that people are making these patches, and that the AmigaOS is good enough to be able to use them, but an OS revision is needed pronto, even just one with stuff like MagicMenu, MultiCX etc, all built in or stuff like them.
2. Everyone should get a modem and Internet access now. It is brilliant. You get access to loads of stuff. To those who don't have Internet access, I'm sure you've heard it a million times before, but I was like you a few months ago, now I can't imagine life without it. Well, it's great anyway. NetConnect2, whilst still in need of a little fine-tuning, is excellent, too.

That's all I have to say for now. Keep up the good work also.

Isaac Abraham, via email

NotConnect?

I've just installed NetConnect2 on my system (A1200, Blizzard 1230IV, 8MB RAM, Surf Squirrel) and I am far from being impressed. I installed it as a replacement for MIAMI/ IBrowse/ YAM and now find that I can only achieve 57600 bps whereas with Miami 115200 was not a problem.

I can't make head nor tail of Voyager's offline cache system, or the cache browser. Perhaps I am missing something, but I feel that NetConnect2 is a non-starter as far as I am concerned.

Simon Quigg, via email

Yes, you are missing something: the NetConnect mailing list, and the NetConnect support website. The cache browser problem is a known fault and you can download a fix. Your speed problem can probably be solved too – if you are sure it is configured correctly, check your 1230 isn't choking on a 256 colour screen, which can put too much of a drain on the CPU to allow faster serial speeds.



▲ How about porting Grand Theft Auto to Amiga?

"PowerPC could have been a credible way of holding the Amiga together until the new 'Future Amiga' is here."

Long and hard

It's been a long and hard time for Amiga owners the last few years, and months. There's a lot of issues that needed to be resolved to sort out the Amiga's future, like the bloody mess that Amiga International made over the PPC. I really feel that this issue alone could have helped make a turning point in the Amiga's future. PowerPC could have been a credible way of holding the Amiga together until the new "Future Amiga" is here.

I see a lot of people on the Amiga IRC Internet channel talking about the good old days, and how now most of them are PC owners or are going PC. I can't for any reason blame them. The total lack of control at the top of the chain (ie; Amiga International) has messed up the whole plan of the Amiga.

I am a very avid Amiga user, who uses his Amiga on a daily basis, but I cannot rule out being a PC owner in the future.

I can understand that people feel they have to jump ship, for whatever reason. I just hope that they'll come back for the new Amiga. We need, now more than ever, for Amiga International, to talk to us, advertise, and support the Amiga users. How?

Maybe by sponsoring the development of games (a true crowd puller) or by coming up with a road map for the future and actually sticking to it. If they can do this, and a bit more, the future will be bright – it'll be boing shaped. If not, I fear it'll go like CBM did: pear shaped.

I think it's fair to say that the Amiga users cannot and should not be the sole thing that supports the platform.

Mark Wilson, member of the AmiBench Team, via email

Grand Theft Porto

This is a small request to all CU Amiga readers who would like to see the PlayStation and PC game Grand Theft Auto converted to the Amiga. I am not planning any petition as most multi billion pound companies will not be interested even if there is a market. In their eyes it's PlayStation, N64 or PC. No other computer even gets a look in (that's until Amiga makes a come back). Anyway I am interested in making an Amiga specific version of

... and a few more

least one thing remained: write to let you know how good you were and if you will be back one day I'm going to do a lifetime subscription. Ciao!
Ebo

I'm probably the only person still trying to stay positive about this. All I want to say is thanks. You kept me going on a computer that is five years old, and I've loved every minute of it. I don't know what I'll do now, whether I'll stay with the Amiga or move on and wait. I'd like to hear what Ben and Nick from AF will say. Obviously it's bad news for them too – we all know you got along really. Anyway, I'll leave it at that. Thanks again, you were all great!
Tim Parkin

My thanks to you all for the many years of quality entertainment and fun that I had reading your magazine. I would also like to thank you for running this mailing list, which has brought a new dimension to the magazine. I wish you every success in the future.
Steve Clark
Manager, DruidPoet Enterprise

It was the best of times, it was the worst of times.

Best in that CU has been improving more and more over the last months/years with some of the very best issues and CUCDs appearing lately. Anticipation of the new Amiga coming late next year and also the PPC boards, cracker games like Genetic Species and Foundation, applications and hardware appearing recently.

But it also couldn't be much worse with my favourite Amiga mag anouncing its closure after a steady drop in sales over the last few years. It was the first Amiga mag I ever bought way back in late 1990 when I got my first A500. And ever since it's the one Amiga magazine I have bought every issue of since then (well most of the other major ones too. It has also been enjoyable writing the E2260 development diary along with my fellow developers for CU Amiga although sadly we will never be able to finish its six month run. We have been really proud to be honoured in sharing the development of E2260 with your many readers. Hopefully CU will return when the new Amiga is released and get to do the preview proper of E2260 that was so well done in the September issue.

So farewell to Tony, Andrew, Neil and the rest of the gang, it has been great knowing you. I'm sure we haven't heard the last of you in the Amiga world.

Grand Theft Auto, which takes the Amiga's strong points and puts them into an Amiga version. GTA is not the most power hungry game ever with its basic graphics and simple overhead gameplay, but it is quite addictive and lets players do what they want, which appeals to a lot of gamers.

As I am not a very good programer and have no talent in graphics or music I am asking other talented Amiga users who would like to give something back to the Amiga market to get in touch with me and hopefully get an Amiga version of GTA out. It will not be an exact copy due to copyright laws etc, but a good clone of GTA in the Amiga PD or commercial market would be nice to see. If any programmers, graphicians or designers are interested in making this GTA clone please get in touch with me at the address given below. You can be a programmer in anything from AMOS, Blitz Basic, ASM, C, C+ or any other capable programming language.

Please send an example of your programming, music or graphics. Send them to: Chris Seward (GTA), 10 Scafell Close, Eastham, Wirral, Merseyside, L62 9EU, ENGLAND. Or email aio@freedom.usa.com

Chris Seward, Merseyside

Glint Eastwood

After seeing details about the new Amiga coming in about two years' time, I feel the question must be asked: "Will it really be so wonderful?" I agree the specifications are impressive at this point, but as technology (namely the PC) moves on I don't think the new Amiga will be any better, or at best 'much better' than PCs that will be around in two years time.

Take the graphics capability. You say around five times faster than Voodoo II, but then in a screenshot you show the Glint 3D, which I believe is available for the PC very soon? So in reality, the PC already has a graphics card much more powerful than Voodoo II, so just imagine what it will have in two years time! Then, we move on to sound. How much further can sound go than what an AWE 64 Gold can do?

Finally, the CPU. Mass PC sales means millions upon millions of people will buy Intel processors keeping ultra fast CPUs very cheap for Mr Average to buy.

So, in my view, the Amiga cannot hope to possibly beat the PC in terms of performance. Even if the Amiga did overtake, it wouldn't stay ahead for long. Therefore, I believe software support and belief in the Amiga will keep it alive, not superior technology. The Amiga even in its current state is more than capable of running applications like Word, Netscape etc. But it just doesn't have the support. Instead of producing a wonder machine, why isn't money being poured into encouraging development for the Amiga?

The only hardware improvements that are needed in my view are PCI slots and an Intel CPU slot, with drivers and the necessary modifications. Couple this with good software and the Amiga could well once again be the machine for 'everybody'.

Long live the Amiga, in whatever shape or form it takes next.

Paul Jones, via email

Things can always get better. We think the key to it is exploiting current and future PC-oriented hardware expansion technology where appropriate whilst developing a platform from the base upwards. Fortunately this seems to be the Amiga Inc strategy. It's the way it all sits together (including the OS) that's the important part.

You ask how much further you can go than an AWE 64 Gold sound card. The answer, as with the other components, is that you can go on improving forever!

"If we have to wait until the middle of 1999 before we get those new Amigas, we might have to use them in heaven"

Suma darts on

Hi, thank you for a cool magazine (getting better each month!).

Well, I don't know if this has struck you, but have you all forgotten about Nostradamus? I'll bet you're all familiar with his work, and the fact that worryingly much of his predictions have become reality. And for you out there who aren't familiar with his work...

He was a man who lived between 3-400 years ago. He wrote hundreds of poems which turned out to be predictions of the phuture! For example he wrote about a terrible guy who was born in Germany who would start a war that was more grotesque than anything seen before, all happening in the middle of the 20th century; his name was "Hister". Close! Later the world war would be ended with something described as mushroom-like things with a destructive force so powerful it was like the sky being torn apart! You get the picture? He is frighteningly close!

Now, the same man has predicted a war in 1999 so big, so destructive and so violent that almost the entire human race will be wiped from the face of the earth. I don't have the details in front of me now, but it's ugly!

My point is: hurry up Gateway!!! Or else we'll miss those new Amigas. If we have to wait until the middle of 1999 before we get those new Amigas, we might have to use them in heaven; or hell, but then there would probably be some kind of checksum error on the harddisk surface! And what if we find out that there is no heaven or hell? A nice dilemma isn't it?

Now you're sitting there laughing, thinking what a paranoid soul I am. But how do you know?!

Gunnar Alvheim, Norway

Hmmm... Nostradamus was never that direct with his poems, and he never meant to predict anything with them anyway, and Hitler was born in Austria... but you've got a point!

Scarlet pimp

So what's the deal? Lisa, Paula, Agnus, Denise, Gayle and GARY!!! Who the *£%$ is this Gary bloke? Is he the pimp or what?

Andrew Clarkin, via email

Goodbye dear friend CU Amiga.
Ed Collins
World Foundry

Though I've not been an Amiga user for the past two years, I was just getting back into the scene after hearing about the new developments by Amiga Inc. It's a long story, but at the time I had no choice but to switch to PC.

I'm very sad to hear that the magazine which I used to buy without fail just a few years ago is coming to a close. I was so looking forward to getting back into the world of the Amiga, away from the stale PC scene, and CU Amiga would once again be on the top of my "to buy" list.

But, there is hope. Maybe when these new super Amiga machines come out, just maybe they'll make a huge impact and we can let the good times role once more! I'm expecting to see you lot out with a new magazine when it happens
Mark

Well how about doing a web-based CU Amiga in your spare time? It will be more of a fanzine and everyone could contribute with Amiga reviews,tips,articles...

'Tis a sad day indeed, when the world's greatest Amiga mag folds, possibly never to be heard from again. But then again, maybe you could start the mag up again when we have the new Amiga? Maybe not, but the romping insanity of the CU Amiga team will remain with Amiga users worldwide, and you'll all be renowned amongst the entire community for producing the best made Amiga magazine, even up till the end.
Rick

Some people would say it's pathetic being upset about the closure of a mag. I don't think so. It may seem rather sad (to some) but I eat, sleep, and drink Amiga and CU (it's quite a mouthful). I will forever mourn your departure.

CU for me wasn't just a magazine it was a group of people in the same way Amiga is not considered just a computer.

You produced the most wonderful magazine any Amiga user could hope for and I hope your spirit will live on.
At least we may still see some of you wonderful people on the Net. I am in shock and hope to recover soon. Best wishes to every single person who works at CU, it was great meeting you all at the World Of Amiga. I feel rather sorry for Richard you only recently started. At least I have another issue to weep into and savour.
Liam – 15

Points of View

Time for a few last opinions... please note that the views expressed here are not necessarily those of CU Amiga.



Anecdotes of an upstart



So here we are, almost at the end of the last CU Amiga ever. What is left to be said? Sometimes it's been a barrel of laughs. Other times it's been so frustrating that for the occasional brief moment it all seemed pointless. It's been inspirational and in recent years it's been a hell of a challenge just to keep the mag alive.

Personally it's been an ambition realised. When I was a know-it-all school kid of 15, revelling in publicly correcting (and cruelly humiliating) my Computer Studies teacher whenever he made a mistake in class, I was asked what it was I wanted to do when I left school. I dug out a copy of Crash, the seminal Spectrum games magazine, and stated "I want to do that". After a cursory glance down the list of eligible careers had revealed that Computer Game Reviewer was not an option, the teacher responded "Yeah, some chance!". I'd asked for it I suppose, but that was the response from everyone else too, not just the teacher I'd been winding up for the last couple of years. Regardless, when everyone else was sorting out futures focused on a narrow band of what to me sounded like the most tedious vocations imaginable, I asked my mum for a typewriter for Christmas and set about figuring out how to become the next Robin Candy.

Looking back it was only a year until I managed to bag my first job doing what everyone had said was impossible, although at the time it seemed an eternity. Regular mailshots to all the magazine editors backed up with reviews and mock-up layouts initially got no response but soon reaped the satisfaction of rejection letters. It was Antony Jacobson, then Managing Editor of Commodore Computing International and the fledgling Amiga User International (then Commodore Business and Amiga User, the world's first Amiga magazine), who finally broke under the strain and agreed to give me that elusive first real job. Despite long hard hours and low pay, it was buckets of fun and just as importantly in the scheme of things, proved to me that it's worth having faith in yourself, not listening to the knockers and doubters, and just getting on with whatever it is you believe in.



▲ "Hassle Nick for some freelance" said John Kennedy, so I did... my first work for CU Amiga.

Funny fortnight

The last couple of weeks have been strange. We heard of the decision to close the magazine half way through the production schedule of this issue. We announced it on the Net as soon as we could and ever since have received a constant flow of emails from disbelieving readers. I'd rather not count the amount of times I've typed "This is not a joke" just recently. So many people have commented that it's like losing a close friend. I can honestly say it's the same for me. I'm not saying you're all my best mates or anything like that. I don't even know you really. I suppose it's more like losing an imaginary friend. I'm used to banging away at this keyboard talking at once to no-one, each individual reader, and everyone, which is a bit strange but hard to stop doing. If you see me walking down the street chatting away to myself you'll know I've not handled the change too well.

"So many people have commented that it's like losing a close friend. I can honestly say it's the same for me."

Giss-a-job

It's assumed by many that I'll be going off to work on a PC magazine. I'll be honest with you, at the moment I really don't know where I'll be going or what I'll be doing, but PC mags are far from the top of my list at the moment. Maybe I'll be an astronaut (after all it's only a short step from being a space cadet) or start up a techno club. Maybe I'll combine the two and start up the first techno club in space. Bring an old copy of CU with you and you'll get in for free.

The last thing I must say before I sign off is don't assume that it's all over now that we've gone. Sure enough it's going to knock the confidence of the scene in general, but it needn't be terminal for the Amiga as a whole. If there's no more Amiga development I'm going to have a hard time finding decent subjects for any freelance work I manage to get with other technology mags! I want to see ImageFX 4.0, Sound Probe 3.0, Wordworth 8, OctaMED SoundStudio 2, Wildfire X.x (what number is it up to now?), and I'm sure I'm not the only one. If you do too, make sure you let the developers know. If you haven't yet got an Internet account then this is the time to get one sorted. The Net has been crucial to the Amiga's survival over the last few years and will continue to be a valuable medium. Meet people, buy products, swap creations, help each other out, keep it going.

Thanks to Nick and Ben over at Amiga Format for giving us a good bit of sport. You can have your old strapline back again now. We've finished with it.

I'll get my coat then. ■

Tony Horgan,
Editor of CU Amiga

Proud as punch



I joined CU about 22 months ago. When I took the job, I thought CU wasn't likely to last very long and I'd be out on my ear within a few months. The second Amiga buyout was dragging on. A couple of minor players in the US had been linked with it, but these companies were far too small to keep the Amiga alive. Amiga magazines had been dropping like flies, and the market was down to four. Why were these idiots hiring me, then?

As it turned out, CU was still a pretty healthy proposition, although on a downward spiral. It has been common wisdom here from the day I joined that unless something happened in the Amiga market, the magazine would eventually close. We have defied expectations for a long time, but finally the day has come. Ironically our long belief was wrong, and the magazine closed when something is at last happening. Alas from a commercial viewpoint, EMAP didn't fancy the long time span before the results of this activity would have any chance of paying off.

60% down

In those 22 months, the market has continued to shrink. The first issue I worked on posted a circulation of 36,836 in a market of 100,000 magazine sales a month. This month, we have posted a circulation of 21,599 in a market of just under 41,000. This has made it tough in more than just financial matters. It has been a continual struggle to bring you reviews of new products, news and articles of relevance and interest. Oddly it has made working for CU much more interesting and challenging.

When I joined, the games section was packed with reviews of games I wouldn't have touched with a ten foot pole in the Commodore 64 days. We made a very conscious effort to make it better, finding odd little projects, encouraging small developers, giving publicity to titles in development that looked good rather than already released commercial titles that we knew were garbage.

Mags for other platforms fill their news pages with press releases, but we figured you can read about the latest Hewlett Packard printer anywhere, so we have gone out and hunted news down. Sometimes we've had to dig hard and do a bit of serious investigative journalism, not something all that common in the computing press. It's been fun.

Spaceboy

We've constantly tweaked our formula and brutally cut out anything we consider dead wood. We've been able to get away with a few innovative things, such as selling our publishers on the AirLink circuit board. We've been allowed to do imaginative covers that would never have happened in a market where publishers are too scared of competition to be different – the Quake cover, the controversial (but excellent!) Rian Hughes Spaceboy cover, the sperm cover. This month's certainly is, too.

We've moved heavily into new media, with a CD which evolved under the auspices of Mat Bettinson and Neil Bothwick into what I have no doubt is the best CD-ROM on any mag for any platform anywhere. We lead the way with our website, and were planning innovations (an instant news ticker) until the very last moment. We've had a policy of extensive interaction with our readership, notably through our mailing list – almost unique in publishing at this scale.

It has been an odd sort of golden age for the Amiga. Sales are poor and getting poorer, which saddens me, but the products are some of the best there have ever been. It's been an odd sort of golden age for CU, too. I am very proud to have been a part of it. ■

Andrew Korn,
Deputy Editor of CU Amiga

"Sometimes we've had to dig hard and do a bit of serious investigative journalism, not something all that common in the computing press."



▲ If you thought this cover was rubbish, then you're wrong – Shut it!

Controversy corner

What is it about John Kennedy? He writes a great POV on what makes the Amiga what it is and it gets complaints. I seem to be able to write anything and people agree – even when I suggested that Amiga and Apple co-operate on a common hardware platform, no-one complained. It's my last chance, so here's some controversy fodder for you.

1. Emulated Amigas are real Amigas. If an Amiga with a PPC in it is still an Amiga, then why shouldn't one with a Pentium in it be an Amiga? Is PowerMAC UAE more 'real' than x86 UAE? Of course not. If it runs Amiga software, it's an Amiga. Computers running UAE are Amigas, they're just rubbish ones.

2. Amiga Inc MUST sort out their PR. Excuses about wanting to keep 'under the radar' are nonsense, the Amiga industry needs to know that they are doing something, not necessarily exactly what. They are losing the confidence of the Amiga community totally unnecessarily because they are seen to be sitting on their arses twiddling their thumbs, and they want you to sign a non disclosure agreement before they'll deny it.

3. The new Amiga has an excellent chance, but it may not be what you or I initially want. Everyone is crying out for an alternative, and Amiga Inc seem to be doing exactly the right things to provide that alternative. However a home computer for the dedicated specialist enthusiast will not have a massive market, so expect an emphasis on the WebTV/entertainment centre/games console sector first.

4. Not controversial for the vast, vast majority of Amiga users, but might seem so for a small but influential number – not Class Act, for god's sake!

The future's open



This is my final point of view in the final issue of CU; I'd better make it count, huh? Before I leap onto my soapbox, a few points: thanks to everybody who has bought and supported CU-Amiga over the years and thanks for all the comments and good wishes with regard to its impending closure. Six months simply was not enough time . . .

The Amiga market will survive CU's untimely mortality, it is clear. But for how long, is the question. It is my belief that the one thing that could turn the ebbing tide at this point would be if Amiga Inc. were to release the source code for OS3.1 into the public domain. My reasons for this are set out below. First, what would the benefits to Amiga Inc. themselves?

The Pros for Amiga Inc.

Amiga Inc. claim to need the support of the existing Amiga community, despite the fact that their performance to date is evidence to the contrary. If they really did care about the Amiga community, then the greatest gift they could give would be the source to the OS. This deed would recompense all their empty mouthings of commitment.

Such an act of generosity would have no ill effect on their proposed new Amiga. This new machine is an entirely separate entity; it is an Amiga in name only. The "Classic" Amiga user-base can only be a small slice of the target market for the mythical next generation machine.

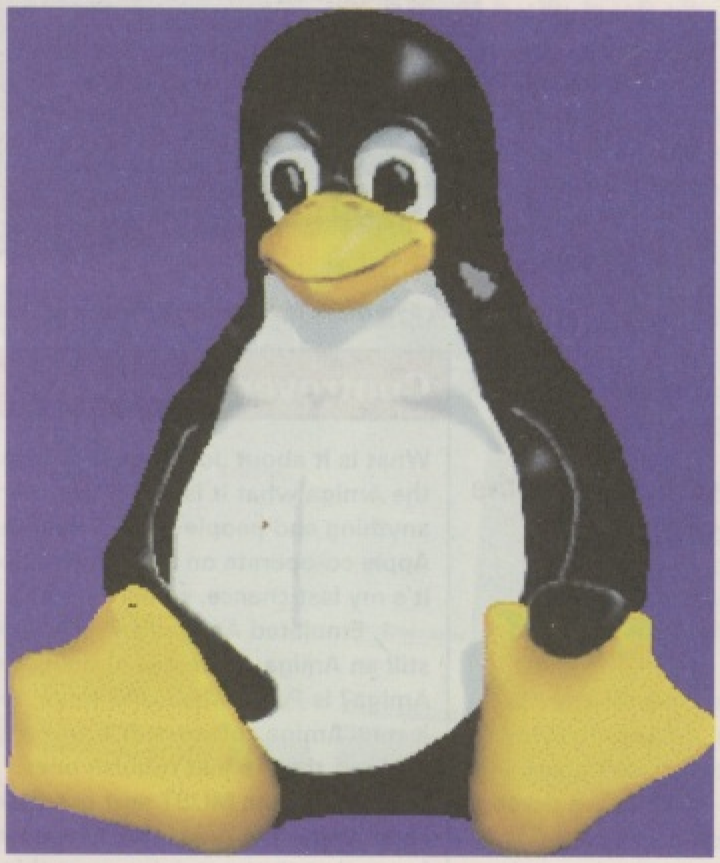
Amiga's on-again, off-again attitude to producing a new version of AmigaOS – the much-fabled OS3.5 – begs the question whether they lack the will or competence to perform the task. Certainly they are not well-placed to do this upgrade; they lack experience of the OS itself and of the markets real needs. By passing the burden to the Amiga community as a whole, they would relieve themselves of the headache.

The rumours currently circulating about OS3.5 claim that Amiga Inc. would wish to sell 70,000 copies of an OS upgrade. This is clearly unrealistic. I think they would be lucky to recover the development costs.

A precedent exists for the release of code that software companies can no longer directly make money from. Netscape's Communicator is a very visual and successful example. Many of the best recent Amiga games originated from a similar source: Doom, Quake, Descent, Abuse.

There have been tentative steps towards this trend in the OS market, too. Sun have made Solaris freely available for non-commercial use, while IBM have been pressured to do likewise for their OS/2. The release of the OS source code would be a good PR move for Amiga Inc.

Openness is a current buzzword in the computer industry and one that Amiga have bandied about in connection to their new machine. A real act of openness can only be good publicity.



▲ Any OS that has a comically overweight penguin as a logo is all right by me.

The Linux model

The greatest success story in operating systems today is Linux. From its humble beginnings as an experiment by one Finnish student, it has become a respected, mainstream OS with an estimated user-base of around five million. System administrators are turning to Linux in favour of Microsoft's flagship, Windows NT, because of the former's low cost and bomb-proof stability.

The robustness of Linux is a product of its bottom-up maintenance and development. There is no single guiding force; updates and improvements are effected by the users themselves. Not only does this mean that each update is subjected to rigorous peer-group review, but also that updates occur more quickly and are more relevant (the users know best what features they need). A knock-on effect is that the Linux user-base is well-informed and technically able. The Linux community was awarded the best technical support award in 1997 by the InfoWorld online magazine.

Parallels can be drawn between the Amiga community and the Linux community: both are dedicated and vociferous; both have a vigorous internet presence. If the AmigaOS source code was freely distributable as well, then the benefits that this open policy has given to Linux could apply to the Amiga.

A crucial factor in Linux's fecundity is its portability. If the source to the Amiga's OS were available, it would be free to be ported to any hardware platform, too. Certainly, 68K emulation would be required for legacy compatibility, but this presents no real problem.

"The view seems to have been that the core of the OS, by being burnt into ROM, is carved in stone. This must change."

The AmigaOS needs to adapt to survive. While there have been some spectacular developments in the last few years – all of which were third party – these improvements have been limited in scope. The view seems to have been that the core of the OS, by being burnt into ROM, is carved in stone. This must change.

The battle plan

If you wish the Amiga that we know and love to survive, there are things you can do.

Firstly, you can petition Amiga Inc. to do the decent thing and release the source code to AmigaOS. Phone, write, e-mail – I don't care – just do it.

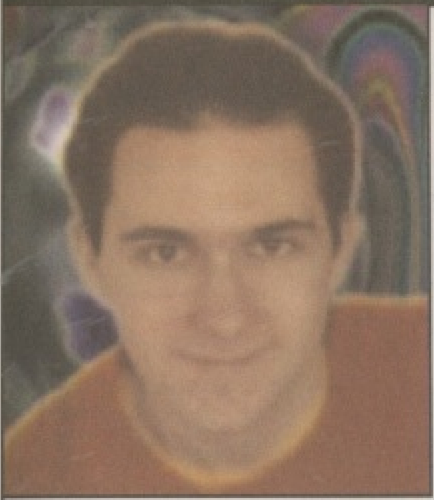
Secondly, you can pledge your support to the AROS project. For those that haven't heard, this project is the reverse-engineering of AmigaOS to produce a compatible, portable and bug-free operating system. If the AROS team had access to the actual OS code, their jobs could be made so much easier.

Thirdly, if you haven't yet got Internet access, then go out and get netted, now. The internet has been responsible for the flourishing of Linux and likewise it has been one of the factors that has enabled the Amiga to survive this far. The importance of the 'net for the Amiga's future cannot be overestimated. Lastly, buy a subscription to Amiga Format. As the single remaining Amiga magazine in the UK they require and deserve your support.

And if, despite everything, the "Classic" Amiga does turn up its toes and dies, then – oh, well. It was fun. Now raise your impudent digit to Amiga Inc. for letting this happen and get yourself a copy of Linux. ■

Richard Drummond is Staff Writer for CU Amiga

Letter from America



I distinctly remember my first issue of CU. I had never really read a British Amiga magazine – and they were and still are somewhat different from American publications, although changes in the market have brought them closer together. But a local software store carried CU and I was pushed over the edge by the "Win a CD32!" competition – they weren't available over here yet. I didn't win, needless to say, but I read the issue anyway.

I started reading more often, especially when my girlfriend, who worked in that store, could get the unpurchased issues smuggled home for free. CU was a bit much for my tastes, seemed obsessed with games, had a rather silly "hint vampiress" (how many of you really felt there was a busty maiden churning out tips for Monkey Island?) and giving them somewhat questionable reviews (I'll never forget CU's highest-ever game score of 97% for Frontier... will you?), but it was a fun resource to have around. I was working on Amiga Report quite religiously back then, so it was nice to have a diversion around. Editorial changes started to set in, some of those game reviews gave way to meatier coverage, and when CU's Mat Bettinson asked me one day if I'd like to do a US news column, I said "Sure!" A half-page turned into a full page, a full page turned into the many reviews and features I've been able to write for CU over the past three years.

"I was genuinely proud to write for CU Amiga and its editors, who were nothing but helpful and open to my suggestions."

The CU we must leave behind is not Dan Slingsby's CU. I was genuinely proud to write for CU Amiga and its editors, who were nothing but helpful and open to my suggestions. They let me indulge my curious obsessions with text games and emulators, and even believed that an American could talk about soccer! More importantly, they had turned CU Amiga into a truly great publication. I honestly cannot think of any other Amiga magazine, at any stage of its life, which provided a more competent and balanced mix of coverage than CU has for the past few years. I only wish it could go on. ■

Jason Compton,
CU Amiga's US Correspondent

Keeping the Amiga on track



The news of CU Amiga's closure came as a great shock to just about everyone. It's another sign of the fragile position of the current Amiga market. Although the magazine was increasing its market share, the publishers made a commercial decision based on how much profit they thought they would make. However, this does not mean the Amiga is dead, I didn't feel much like working the next morning, but when I eventually sat down in front of my Amiga, it worked as well as it had done the previous day. The Amiga will go on. What has been lost, more than anything else, is a channel of communication. Communication between developers and users, between advertisers and buyers, between enthusiasts and professionals. Some people have cited the growth of the Internet as a factor in the decline in magazine sales, I don't believe this is so. In fact, the instant feedback of forums like the CU Amiga mailing list has enabled everyone to express their opinions and desires, this has certainly improved the quality of the CUCDs by taking onboard many of the suggestions and criticisms received. In fact, my involvement with CU Amiga and the CDs came about as result of a posting to some Amiga newsgroups by Mat Bettinson. Now, more than ever, there is a need for the sort of instant information on the Amiga market that the Internet provides.

"Now, more than ever, there is a need for the sort of instant information on the Amiga market that the Internet provides."

Keep buying magazines of course, there is always a need for them, for the in-depth and unique information only available when you have people working on it full time, but get online too. The CU Amiga mailing list will continue to provide information and discussion, the Amiga newsgroups provide valuable information and technical help, including posts from Amiga Inc staff and other developers.
The Internet isn't just a file repository like Aminet, you can get that from CDs, it isn't just a collection of web sites to be read passively like watching TV. It is a means of almost instant communication between Amiga users (and everyone else) worldwide. It has never been easier to get online, and operating costs are falling with faster modems and almost monthly announcements of reducing telephone charges as BT and the cable TV companies compete.



Who should we blame for what's happened? The list of potential culprits is long; Commodore, Escom, Viscorp, Gateway, the lawyers, developers, software pirates, magazine publishers, apathetic users. The truth is that there is no single factor in the complex history of the Amiga, blame is negative and backward looking. We need to look to the future, to move on, to be constructive. I will miss CU Amiga. For the past two years I have been lucky to work with a dedicated team, working on something we all care deeply about. There may be no more magazines after this one, but the spirit of CU Amiga will continue in the online Amiga community. Don't miss out, join us. ■

Neil Bothwick,
CU Amiga's CD compiler & Comms Consultant

TECHNO TRAGEDIES

And now, the end is here...

The thing about Techno Tragedies is that they aren't fair. We all know that they should have succeeded, that they deserved to win...



We know that Betamax was technically superior, that the C5 would have made our streets safer and more environmentally friendly. It's obvious that the Konix would have made a great games console, and that the Sam Coupé was a lovely little machine. We can only begin to appreciate the disappointment of those behind these heroic failures, the people who put so much time, effort and energy into projects, only to see them cancelled.

Now, ironically, it's the turn of CU Amiga to take the spotlight in the Techno Tragedies column. We originally thought about writing about the Amiga, but that wouldn't be fair: the Amiga is certainly not out of the game yet. In fact, for the first time in five years there seems to be a real chance of making a go of things: helped by new technology, an over-reliance on Windows, the growth of the Internet and emergence of technologies such as Java.

Bye bye baby

But back to the case in point, and the demise of CU Amiga. The UK Amiga magazine market was once buoyant enough to support half a dozen titles. Magazines like Amiga Computing, AUI, Amiga Shopper and Amiga Power have now all passed on, and CU Amiga is going with them. We don't think that this is due in any way to the quality of the magazine: in fact, under the editorship of Tony Horgan the magazine was re-born with a new vitality. I happen to think it's been the best twelve months of issues the magazine has ever had. With contributors such as Mat Bettinson and Andrew Korn, CU became close to the technically authoritative magazine which the Amiga never had. While at times it lacked the flashiness of its rival, it was innovative in many other ways. It was the first magazine to have a regular CD-ROM coverdisk, for example.

Do it yourself

CU also had a love of DIY electronics stretching back many years: in fact, the first and only letter I've ever received from the Press Complaints Commission was due to one of my CU DIY projects and the value of a stupid 4.7uF capacitor. In recent times, this DIY passion has re-emerged, although thankfully the projects have been designed by someone who knew what they were doing, such as the MIDI project. Heck, CU even had a PCB taped to the front of one issue.

So what went wrong? Not a difficult question to answer. CU Amiga wasn't profitable. A magazine has to make a profit, and simply the incomes from advertising and sales have to exceed the outgoing costs. Sadly, that wasn't happening any more and so the magazine is being stopped. The Amiga magazine readership figures have tumbled over the last few years, and are now about a tenth of what they were at their peak – can you imagine what would happen to any market if sales dropped that much?

As a freelance, I've worked on many a magazine, and I'd like to pass my thanks onto the team at CU Amiga for making one of my favourite titles. Personally and professionally they were a great bunch of people to work for over the years. I'll always remember the people I've met at CU. From chasing Lisa around the desk trying to get one last pre-marital kiss, to being dragged around Dublin's bars by Alan. Nick and Dan both moved to the Evil Empire, and if you look through back issues you'll see many familiar names in other magazines on the news-stand. And of course there is also Tony's thumpin' chunes: it's only a matter of time before he appears on TOTP. Thanks also to the names which never get printed larger than 8 point text: the art designers, publishers, sales and advertising teams.

And the person who wrote me my contributor cheques – I'll miss you the most. Finally, thanks to all the loyal readers who have kept the Amiga alive, and who have written in with praise or insults. Occasionally I tended to forget exactly who I was writing for, and it did no harm to be reminded from time to time.

Immortality

And what about the Amiga itself? Simple: the Amiga will never die. Even in the worst case scenario, the Amiga will live on through the support of many tens of thousands of fans, eventually as an emulation on other systems. The best case is breathtaking: Gateway pull it off, and release a state-of-the-art multimedia computer which captures everyone's imagination and knocks the WinTel systems off their perch.

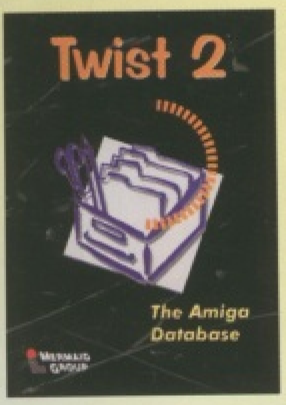
When that happens, we'll see you again. ■

John Kennedy

YOUR LAST CHANCE

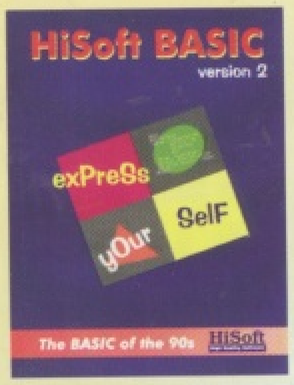
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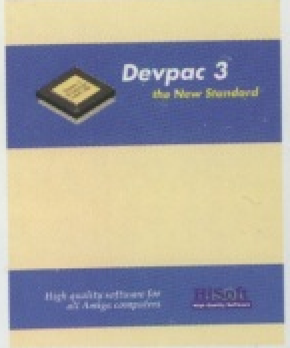
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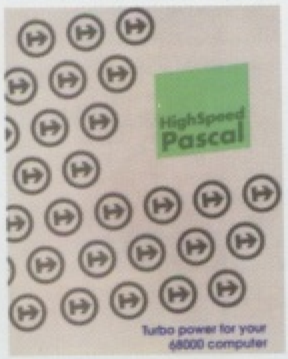
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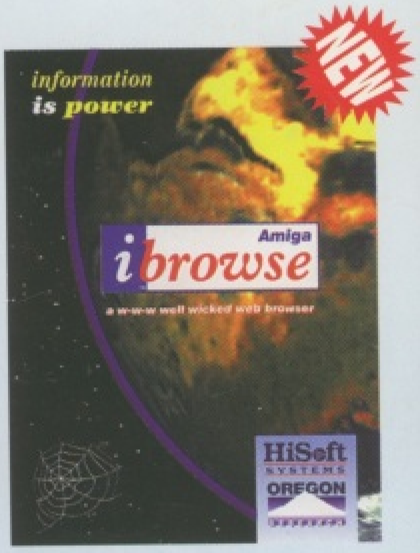
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